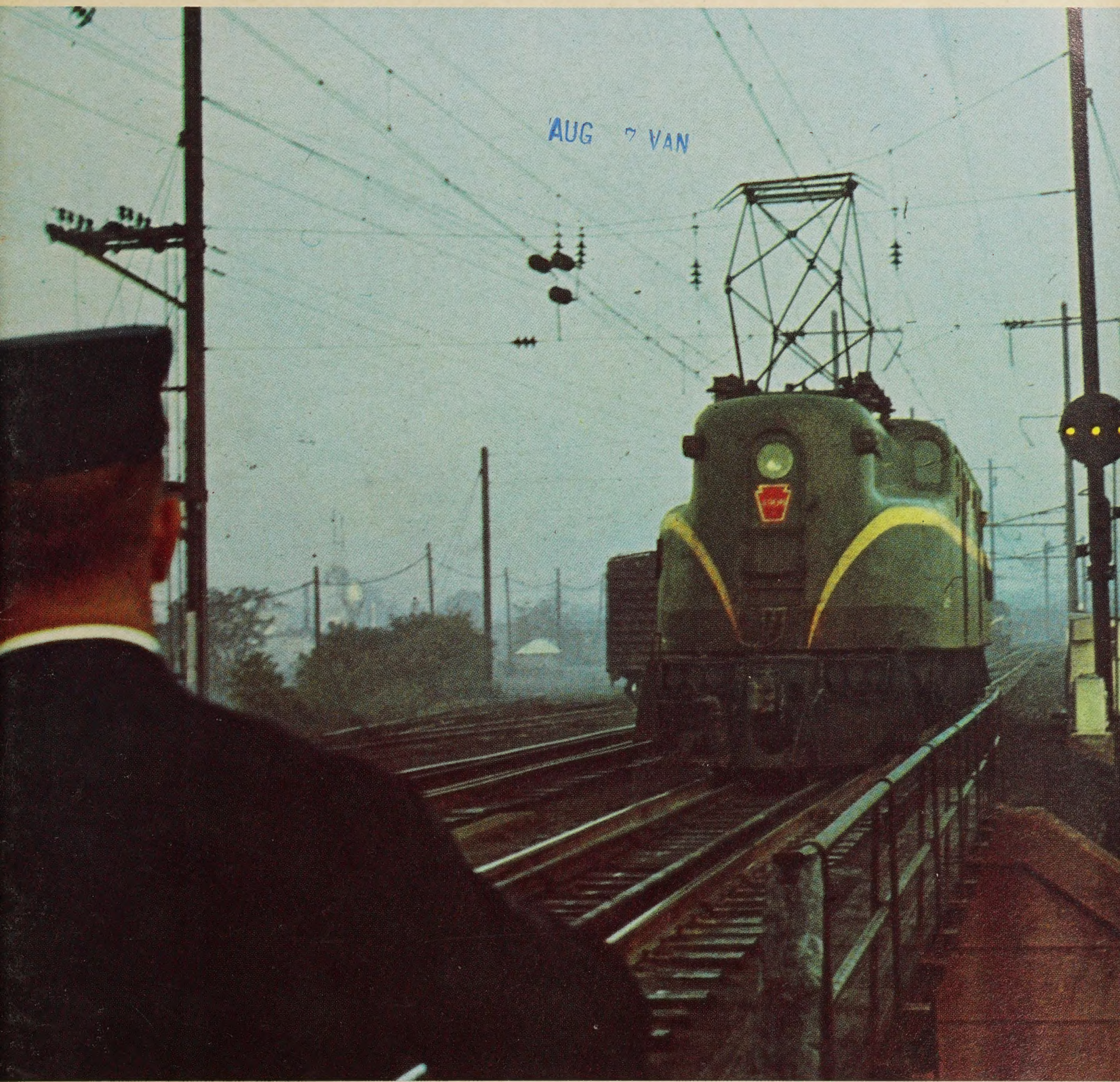
RAILROAD

OCTOBER, 1962 MAGAZINE | 50c



SY REICH: Rollcall of Pennsy Electric Locomotives

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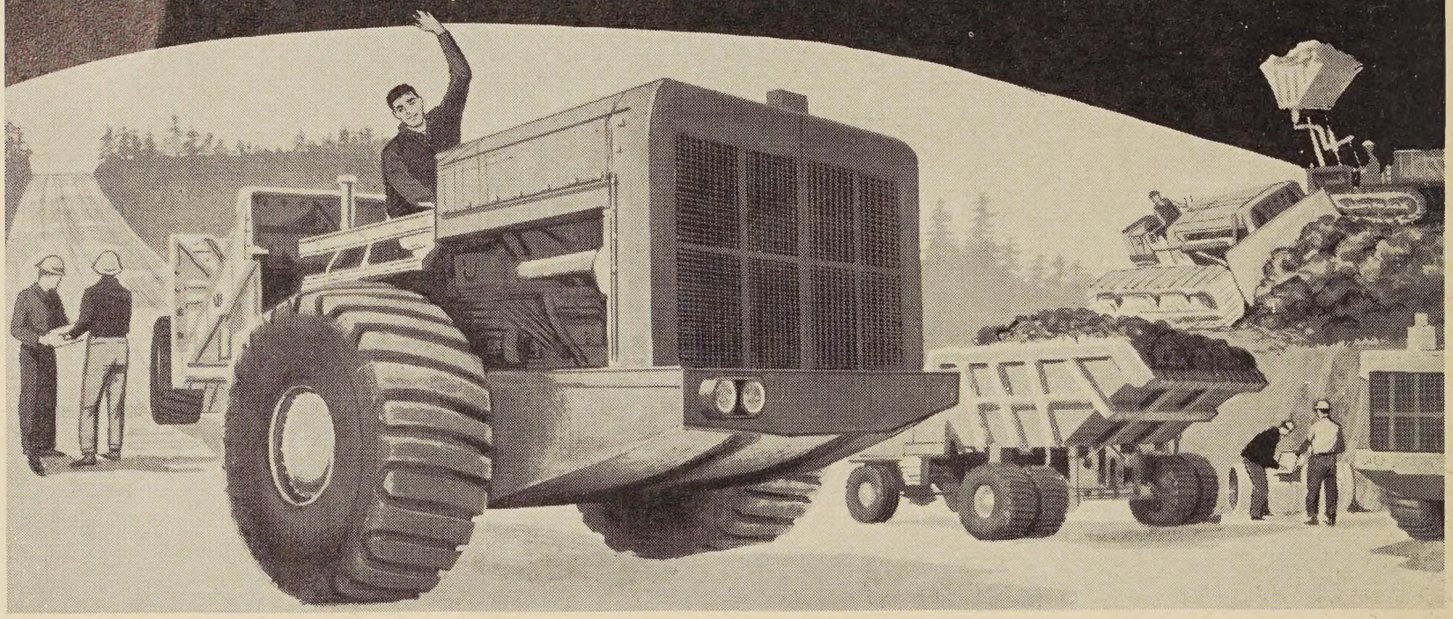
WE OFFER YOU *IMMEDIATE TRAINING* IN
HEAVY EQUIPMENT OPERATION



What you are looking at are the wonder tools of a new age, mechanical monsters that are changing the face of the world we live in. The BULL DOZER . . . the LOADER . . . the GRADER . . . the EARTH-MOVER —these have made possible today's complex civilization. But as mighty as they are these giants are lifeless without the men to operate them. Only under the guidance of a man's hand can these machines throw bridges over wide rivers, create dams to turn wasteland into lush fields, ribbon the broad face of our country with super-highways Only because there are men at the controls are schools, factories, office buildings, hospitals reaching toward the sky.

This is an industry which is spending billions of dollars —yet even as it builds it is unable to meet the demand. This is an industry which is charged with supplying facilities for the explosive increase in population—here and all over the world. This is an industry which offers bright futures to MEN! And these men must come from somewhere!

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You're a hero in his eyes. You *know* that. But how do you look in your own eyes? Are you using your abilities to build a secure future for your family — to give them the good living and advantages that could be theirs? Maybe you lost a few years in military service — or a lack of formal education has shut you out of the big-pay jobs that could be yours.

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- ☐ Toolmaking
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RAILROAD MAGAZINE

THE MAGAZINE OF ADVENTUROUS RAILROADING—FOUNDED 1906

VOL. 73, NO. 6 OCTOBER, 1962 50 CENTS

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Transit Topics

ILLUSTRATED FEATURES

Adventure Rides the *Orient Express* — Freeman Hubbard — 14
110 Years of Moguls — H. L. Kelso, Jim Holden — 22
Rollcall of Pennsy Electrics — Sy Reich — 28
Foreign Railways *(photographs)* — 50
Not Listed in *The Official Guide* — Elliott Kahn — 54
Settebello, Italy's Most Glamorous Train — 62

FICTION

Loose Journals *(Train-Ferry Service)* — T. X. Jordan — 40

SHORT HAULS

Night Train — Oliver Towne — 13
Central Vermont Locomotives — Elwin K. Heath — 6
Roster of Norfolk Southern — Sy Reich — 6
Interesting Railfans: No. 10—Fred A. Stindt — 27
Along the Iron Pike *(Pictorial)* — Joe Easley — 34
Diesel Locomotive Progress — Sy Reich — 52
Roster of Southern Ry. System — Sy Reich — 52

DEPARTMENTS

The Mail Car — 8
Information Booth — 35
Books of the Rails — 37
Transit Topics — 45
Railroad Hobby Club — 58
The Switch List — 60

Steam power on the *Simplon-Orient Express* (see page 14): photo taken May 13, 1962, as she was doubleheaded through Turkey by a 2-8-0 and an 0-8-0.

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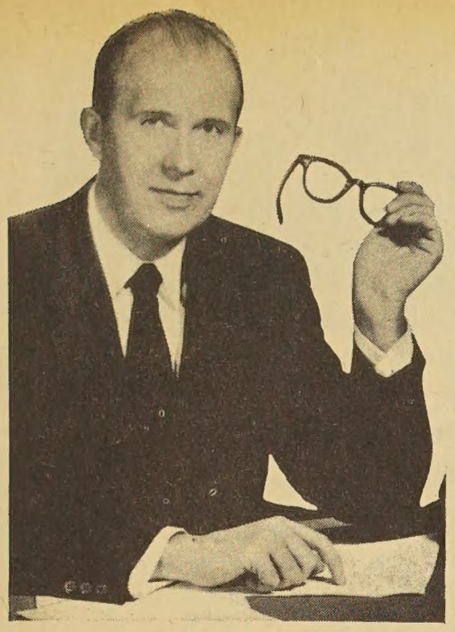

"It's easy," says Don Bolander...

"and you don't have to go back to school!"

How to Speak and Write Like a College Graduate

"Do you avoid the use of certain words even though you know perfectly well what they mean? Have you ever been embarrassed in front of friends or the people you work with, because you pronounced a word incorrectly? Are you sometimes unsure of yourself in a conversation with new acquaintances? Do you have difficulty writing a good letter or putting your true thoughts down on paper?

"If so, then you're a victim of *crippled English,*" says Don Bolander, Director of Career Institute. "Crippled English is a handicap suffered by countless numbers of intelligent, adult men and women. Quite often they are held back in their jobs and their social lives because of their English. And yet, for one reason or another, it is impossible for these people to go back to school."

Is there any way, without going back to school, to overcome this handicap? Don Bolander says, "Yes!" With degrees from the University of Chicago and Northwestern University, Bolander is an authority on adult education. During the past eight years he has helped thousands of men and women stop making mistakes in English, increase their vocabularies, improve their writing, and become interesting conversationalists *right in their own homes.*

BOLANDER TELLS HOW IT CAN BE DONE

During a recent interview, Bolander said, "You don't have to go back to school in order to speak and write like a college graduate. You can gain the ability quickly and easily in the privacy of your own home through the Career Institute Method." In his answers to the following questions, Bolander tells how it can be done.

Question *What is so important about a person's ability to speak and write?*

Answer People judge you by the way you speak and write. Poor English weakens your self-confidence – handicaps you in your dealings with other people. Good English is absolutely necessary for getting ahead in business and social life. You can't express your ideas fully or reveal your true personality without a sure command of good English.

Question *What do you mean by a "command of English"?*

Answer A command of English means you can express yourself clearly and easily without fear of embarrassment or making mistakes. It means you can write well, carry on a good conversation – also read rapidly and remember what you read. Good English can help you throw off self-doubts that may be holding you back.

Question *But isn't it necessary for a person to go to school in order to gain a command of good English?*

Answer No, not any more. You can gain the ability to speak and write like a college graduate right in your own home – in only a few minutes each day.

Question *Is this something new?*

Answer Career Institute of Chicago has been helping people for many years. The Career Institute Method quickly shows you how to stop making embarrassing mistakes, enlarge your vocabulary, develop your writing ability, discover the "secrets" of interesting conversation.

Question *Does it really work?*

Answer Yes, beyond question. In my files there are thousands of letters, case histories and testimonials from people who have used the Career Institute Method to achieve amazing success in their business and personal lives.

Question *Who are some of these people?*

Answer Almost anyone you can think of. The Career Institute Method is used by men and women of all ages. Some have attended college, others high school, and others only grade school. The method is used by business men and women, typists and secretaries, teachers, industrial workers, clerks, ministers and public speakers, housewives, sales people, accountants, foremen, writers, foreign-born citizens, government and military personnel, retired people, and many others.

Question *How long does it take for a person to gain the ability to speak and write like a college graduate, using the Career Institute Method?*

Answer In some cases people take only a few weeks to gain a command of good English. Others take longer. It is up to you to set your own pace. In as little time as 15 minutes a day, you will see quick results.

Question *How may a person find out more about the Career Institute Method?*

Answer I will gladly mail a free 32-page booklet to anyone who is interested.

MAIL COUPON FOR FREE BOOKLET

If you would like a free copy of the 32-page booklet, How to Gain a Command of Good English, *just mail the coupon below. The booklet explains how the Career Institute Method works and how you can gain the ability to speak and write like a college graduate quickly and enjoyably at home. Send the coupon or a post card today. The booklet will be mailed to you promptly.*

DON BOLANDER, Career Institute, Dept. 302H , 30 East Adams, Chicago 3, Ill.

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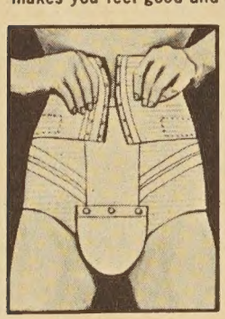

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NAME.....

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CITY.....ZONE.....STATE.....

Central Vermont station, St. Albans, as it looked years ago.

Central Vermont Engines Built by CV

Compiled by Elwin K. Heath

No.	Name	Type	Date	Cyls.	Dia. Dri.	Wt.	No. in 1900	Notes
1	J. Clark	2-6-0	1880	18½x24	51	87500	306	
2	St. Albans	4-4-0	1872	16x24	63	73100	33	
3	J. Q. Hunt	4-4 0	1875	16x24	63	77000	37	
4	Geo. G. Hunt	4-4-0	1872	16x24	63	73100	35	a
(2) 5	D. D. Ranlett	2-6-0	1881	19x28	57	97800	311	
(2) 6	E. A. Chittenden	2-6-0	1880	19x24	57	89000	307	
(2) 7	Geo. Nichols	2-6-0	1878	17x24	57	85000	300	
(2) 10	St. Alexander	4-4-0	1871	16x24	57	68500		b
(2) 11	D. D. Ranlett	2-6-0	1879	18x24	61	84000		c
(3) 11	Woodstock	4-4-0	1871	16x24	61	67100		d
16	M. G. Elliott	4-4-0	1873	16x24	66	69200	43	e
(2) 17	S. L. Woodford	2-6-0	1880	19x24	61	86000		f
(3) 18	W. H. H. Brigham	2-6-0	1881	19x24	54	80000	308	
(2) 19	J. W. Hobart	4-4-0	1884	17½x24	68	99920	54	
(2) 21	Otis Drury	4-4-0	1871	16x24	63	73100	36	g
(2) 22	Lamoille	6-whl.	1859	15x22	54	47870		t
(2) 23	W. H. DuBois	2-6-0	1881	19x24	61	86000		h
24	Pacific	4-4-0	1873	17x24	68	68500	46	i
25	J. R. Langdon	4-4-0	1874	16x24	66	68500		j
26	James M. Foss	4-4-0	1869	16x22	66	66200		k
(2) 28	Edward Blake	4-4-0	1871	16x24	57	68500		l
(2) 29	Gov. Smith	4-4-0	1883	17½x24	68	88000	53	m
(2) 30	Geo. L. Stone	4-4-0	1871	16x24	68	70200		n
33	J. M. Foss	4-4-0	1882	17½x24	63	92200	52	
34	Stranger	4-4-0	1872	16x24	63	73100	34	
35	Richford	4-4-0	1874	16x24	54	68050	14	
36	North Star	4-4-0	1872	16x24	60	70200		o
38	Lansing Millis	4-4-0	1871	16x24	57	68500	15	p
39	John Crombie	4-4-0	1874	16x24	60	74100		
(2) 41	J. M. Pinkerton	4-4-0	1871	16x24	54	68600		q
42	J. W. Emery	4-4-0	1873	16x24	63	74000	44	r
43	Jacob Edwards	2-6-0	1882	19x28	57	95000		
45	L. Brainard	4-4-0	1864	15x24	60	57530		s
46	Hartland	4-4-0	1864	15x24	60	57750		s
47	Hartford	4-4-0	1865	15x24	63	58000		
(2) 48	A. C. Bean	4-4-0	1882	16x24	63	74400	38	
49	Colchester	4-4-0	1865	15x24	63	58500		
50	Alburgh	4-4-0	1866	15x24	63	59300		
51	H. H. Locklin	4-4-0	1869	16x22	68	66000		
52	G. Merrill	4-4-0	1865	15x24	60	58700		
60	R. F. Taylor	4-4-0	1868	15x24	66	63700		
61	Highgate	4-4-0	1866	15x24	60	58500		
(2) 62	Geo. M. Rice	4-4-0	1872	16x24	54	68000	12	
(2) 63	Stowe	4-4-0	1872	17x24	68	72550	47	
(2) 64	Braintree	4-4-0	1872	16x24	54	68000	13	
(2) 65	Fairfax	4-4-0	1872	16x24	54	72000	8	
66	Des Rivieres	4-4-0	1870	16x24	54	66000	9	
67	Waterloo	4-4-0	1870	16x24	54	66600	16	
70	St. Armand	4-4-0	1870	16x24	54	65200		
(2) 71	W. C. Smith	4-4-0	1873	16x24	68	70750	45	
72	Swanton	4-4-0	1870	16x24	68	66600	17	
73	J. D. Hatch	4-4-0	1870	16x24	68	59000	18	
74	Atlantic	4-4-0	1870	16x24	68	59000	19	
86	Arctic	4-4-0	1872	16x24	66	68050		

Numerals preceding engine number indicate 2nd or 3rd engine bearing her number. All 54 engines were built at St. Albans except these eight built at Northfield: Nos. 22 (2), 45, 46, 47, 49, 50, 52, and 61. Alphabetical notes: (a) original No. 84, (b) orig. No. 76, (c) sold to New London Northern RR. in 1881, renumbered 160, (d) orig. No. 75, (e) orig. No. 85, (f) sold to NLN in 1887, renumbered 156, (g) orig. No. 79, (h) sold to NLN in 1887, renumbered 157, (i) orig. No. 81, (j) sold to NLN in 1890, renumbered 175, (k) orig. No. 88, rebuilt in 1870. (l) orig. No. 77, (m) 2nd No. 29, the last 4-4-0 on CV, was sold to the Brattleboro & Whitehall in 1930 but never used by that road, was returned to CV, and scrapped in 1936, (n) orig. No. 82, (o) orig. No. 83, (p) orig. No. 78, (q) orig. No. 80, (r) orig. name T.W. Park, renamed about 1884, (s) sold to Stanstead, Shefford & Chambly in 1884, and (t) rebuilt in 1870.

Norfolk Southern Railway Locomotives

Roster compiled by Sy Reich

Road Nos.	HP	Builder	Builder's Model	Wheel Arngt.	Tract. Effort	Weight	Built Year
661-663	660	BW	DS 4-4-6	B-B	59,994	199,980	1946-7
701-703	600	GE	70 ton	B-B	41,300	137,600	1948
1001-1002	1000	BW	DS 4-4-1000	B-B	72,831	242,770	1947
1501	1500	BW	DRS 6-4-15	A1A-A1A	56,100	280,000	1947
1502-1510	1500	BW	DRS 6-4-15	A1A-A1A	53,100	265,500	1948
1601-1605	1600	BLHW	AS-416	A1A-A1A	58,290	291,460	1951
1606-1610	1600	BLHW	AS-416	A1A-A1A	57,980	289,900	1952
1611-1613	1600	BLHW	AS-416	A1A-A1A	57,600	288,000	1954
1614-1615	1600	BLHW	AS-416	A1A-A1A	57,801	289,000	1955
1616-1617	1600	BLHW	AS-416	A1A-A1A	56,700	288,000	1955

Roster based on data from Chief Mechanical Officer, Norfolk Southern Ry., accurate as of April 5, 1962. Builders: (BW) Baldwin-Westinghouse; (GE) General Electric; (BLHW) Baldwin-Lima-Hamilton-Westinghouse. No. 1510 has been scrapped.

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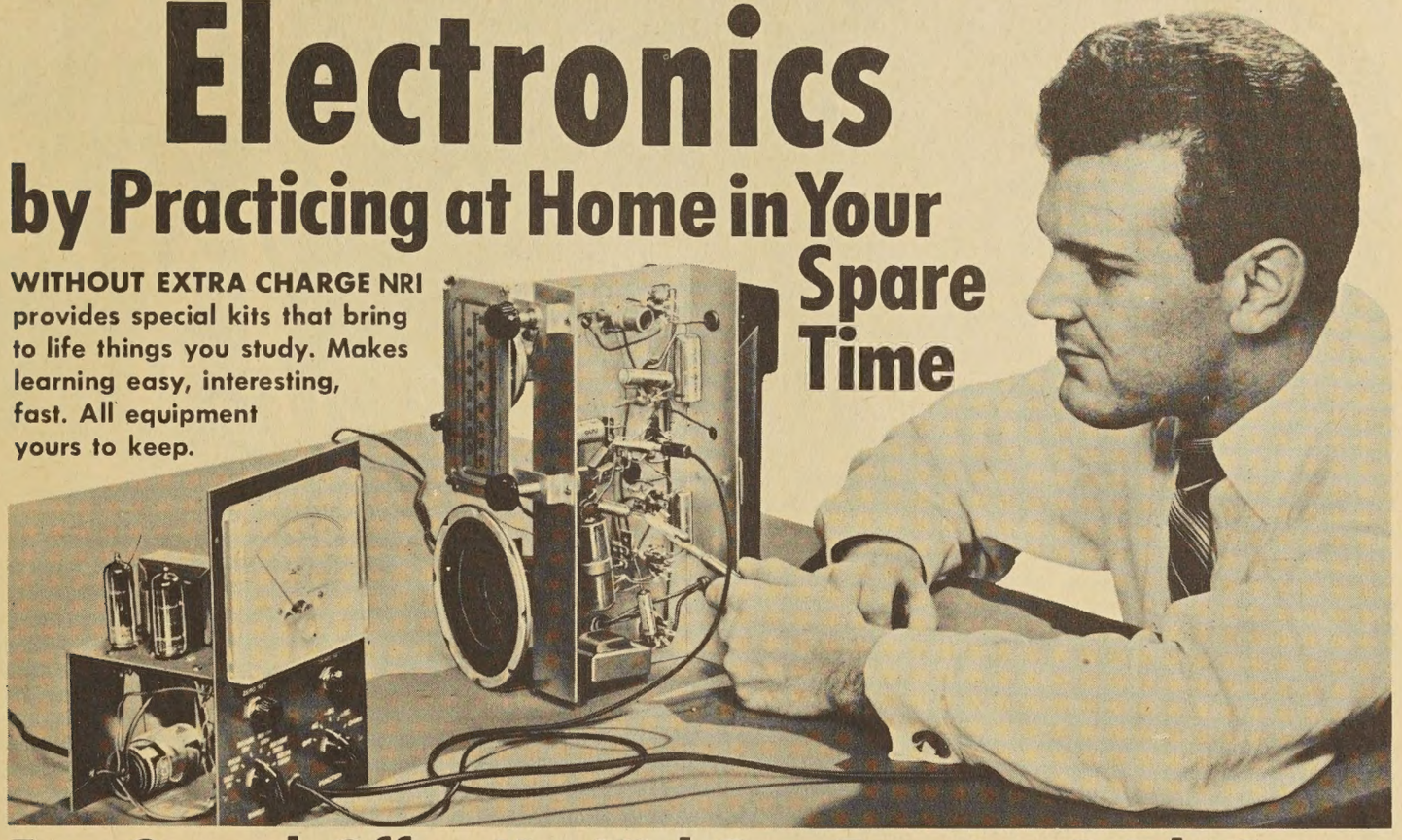

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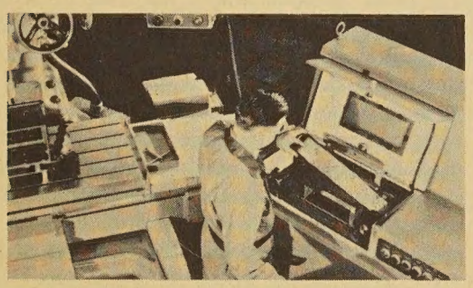

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If you check the classified advertisements in your local newspaper, you will undoubtedly see more job opportunities available for men with Electronics training than for any other field. Hardly without exception, these are *better than average* jobs, with bright futures . . . jobs for which YOU could qualify through NRI training. Thousands of men like yourself—most of them without a high school diploma—have moved up to good pay and enjoy greater prestige in jobs with TV and Radio broadcasting stations, in industrial plants making Electronic equipment or in businesses of their own where they sell, install and service Radio and TV sets.

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I was working in a textile factory trying to make ends meet. Now I own one of the most modern service shops in this section. ARGIE C. TAYLOR, Glasgow, Ky.

After graduating I was a shipboard radio operator. Now I am chief engineer at Station WARA.

NRI was a wonderful foundation. RAYMOND D. ARNOLD, Attleboro, Mass.

Thanks to NRI I am in a top position with the Federal Aviation Agency in the Navaids Electronic Section. JOE DUCKWORTH, Fort Worth, Texas

Four months after starting your course I left my job in a hardware store to work at Raytheon Manufacturing. Now I am an engineering assistant in Microwave Power Tube Research and Development Laboratory. LEONARD BLOOM, Newton Centre, Mass.

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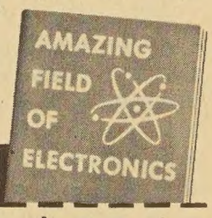

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MAIL CAR

Railroaders and Fans Sit in With the Editorial Crew

COLOR-SHOT on our cover shows a Pennsy electric coming up to replace a diesel at Rahway, N.J. The Keystone Road completed electrification of its North Jersey coast run Feb. 10, 1935, at South Amboy, but for economic reasons is now changing locomotives at Rahway instead of there, exchanging GG-1's for Baldwin BP-20's, GM EP-20's or 22's, or vice versa.

The GG-1 photo was made by Bob Purdy, 89-36 Whitney Ave., Elmhurst, N.Y. Bob is a clerk, an HO scale model fan, and a steam-power enthusiast. One grandfather was Pennsy assistant yardmaster at Cove Yards, Jersey City. ●

One of America's great trains, shown with famous red carpet, marked its 60th birthday June 15th with huge frosted cake, a lunch at the Biltmore, and talks by Lucius Beebe and NYC President Perlman. Each guest was given an advance copy of Beebe's newest book, *The 20th Century*. The red carpet, weighing half a ton, is rolled out every day an hour before the *Century* leaves Grand Central Terminal at 6 p.m. for swift run to Chicago. No other railroad flatters passengers in this manner.

WITH over 6000 miles of heavy electric traction, Russia now leads the world in this field, laments E. J. Quinby, founder of Electric Railroaders' Asso., 480 Broad St., Summit, N.J.

"Here in U.S.A., where the industry was born," he goes on, "we are destroying what mileage we have left. It is tantalyzing to note that electrification of the Trans-Siberian Ry. is 85 percent complete and going forward rapidly. Meanwhile, Italy, France, Switzerland, Great Britain, Japan, and other energetic foreign countries are busy electrifying their rail lines. American bankers deny funds to American railways for electrification projects while urging them to accept loans for the purchase of diesel locomotives!" ●

GREENWALD'S article on the Cincinnati subway (Aug. issue) didn't go far enough in describing the only underground rail line ever built and not used. So says Don McClain, 711 Westport Rd., Kansas City, Mo., president of the Cincinnati Car Riders' Association.

"We called it a brand new subway," he writes, "because it was virtually complete in every detail except rail. All grading was finished for 11 miles, and 4 more miles had been cleared. Bridges and stations were ready to use, with stringers in place for the rail.

"In 1923 the Cincinnati Street Ry. bought 75 cars, equipped with sliding doors for platform-level loading, and couplers for operation in trains of 6 to 8 cars. Furthermore, Winton Place Shops, built in 1929, had double-gage track laid throughout so that both wide-gage streetcars and standard-gage rapid-transit cars could be serviced. If anyone were to operate the subway, the Street Railway would do so.

"Incidentally, that photo on page 21 could not possibly have been taken in the Cincinnati subway. No such track was ever installed there." ●

NOW HE KNOWS. "For a long time I've wondered what became of the electric motor I worked on with the Glendale & Montrose in 1924 at Glendale, Calif.," says Bill Knapke, 9-A North Lane, Orinda, Calif. "Well, I found the answer in Sy Reich's 'Shortlines of Washington State' (Aug. *Railroad Magazine*). No. 9 of Yakima Valley Transportation Co. is that same wonderful little motor I remember so well."

Memories of long ago fill Bill's alert brain. He wrote the following item for the *Port Costa* (Calif.) *News:* "Probably the most hazardous duty a switchman had to perform regularly was coupling a Miller hook into a Janney coupler. The Miller hook was much like an oversized crochet needle flattened top and bottom with the barb turned to right. Its 'needle' swiveled at the rear end and was held to the center line of the car by a coil spring on each side. An upright lever passing through a slot in the end sill pulled the hook to one side when uncoupling.

"The first Janney knuckles had a slot in the center and a pin hole for link-and-pin couplings with the oldstyle drawbars. The hazard in coupling to the Miller hook, due to its comparatively free side motion, lay in the fact that the least impact would throw the hook to one side or the other and at the same time twist the link to an acute angle. All this while you were humped down under the coach platform making the coupling about shoulder-high. Them wuz the Good Old Days!" ●

RAILROADING takes many strange twists, but none stranger than a project recently undertaken by the Chesapeake & Ohio, whose fleet of Lake Michigan trainferries is helping restock the Great Lakes with fish. On three separate nights, sailing from Ludington, Mich., a C&O trainferry carried tank trucks loaded with about 73,000 lake trout. About 25 miles out of Milwaukee, over a lake floor shelf known as the Sheboygan Reef, the ship slowed and the fish were spilled into the lake.

Those fish had come from a hatchery and were planted under jurisdiction of the Fish and Wild Life Service of the U.S. Department of Interior in an effort to restock Lake Michigan with trout, a species fast becoming extinct because of the lamprey eel. The fish are identified by punch marks in their fins. From the marks, the Fish and Wild Life Service people are able to tell later on just when and where they were planted. This is good news for fishermen. ●

EASLEY'S *Along the Iron Pike* in April issue pictured what was described as the first industrial diesel-electric switcher ever turned out in the U.S.A., built in 1938 for Lehigh Portland Cement Co. and still serving that company. Joe must have slipped if M. L. Rice, Shelbrana, Ky., remembers correctly. Mr. Rice is a retired Chesapeake

& Ohio Ry. engineer.

"I personally operated diesel-electric locos for the American Rolling Mill Co. at Ashland, Ky., from 1933 to '38," he writes. "Each weighed 74 tons. Alco-GE built them in 1926-'30. I also recall having read in a previous issue of your magazine where the Jersey Central built one of the same kind for switcher service at about the same time." Mr. Rice is correct. ●

LARGEST all-steam road east of the Mississippi River is the Mississippian Ry., running between Amory and Fulton, Miss., 24 miles, according to David W. Read, 1709 4th Ave., Columbus, Miss. The Buffalo Creek & Gauley is only 18.6 miles long. Dave concedes that BC&G is probably the largest in the amount of business handled. We slipped when we gave BC&G credit for the most all-steam mileage in the East. ●

PHOEBE SNOW isn't the girl she used to be, according to William C. Kessel, 99 Center St., Hamburg, N.Y. "In one respect," he writes, "she's better. She cooks much better, and her board bills are lower.

"Back in 1948, the Lackawanna revived the name of Anthracite's one-time glamour girl by using it on the day trains between Buffalo and Hoboken. She had a fast schedule, too. Last year, the merger between the Lackawanna and the Erie called for combining her with that of the Erie Limiteds at Elmira. The switching and other details added nearly an hour to her time.

"But that marriage hasn't worked out too badly otherwise. A dozing coach passenger would scarcely notice. And, east of Elmira, a half-pound hamburger for 85 cents is fair compensation. So is a full dinner for $2.25. Between Elmira and Buffalo, there's a small steak dinner at $2.85; or a fish dinner for $1.95.

"The train crews are friendly, too. Maybe Eastern railroads aren't coddling passengers these days, but the conductors and brakemen who accompany Phoebe actually speak to passengers. The only thing that's missed is that the observation club car runs between Salamanca and Hoboken, so that the Buffalo riders find it almost too much trouble to ride it. That's a long walk through two more coaches, a diner (how those Erie diners jolt, compared to Phoebe's own!) and a sleeper. Scenery is worth it, tho. Maybe some railroads aren't doing much about passengers. *Phoebe Snow*'s employers seem to want them; and $20.35 buys a round trip ticket weekdays, Monday through Thursday."

We like the *Phoebe Snow*, too. ●

BREVITIES. Two hoboes charged with riding in style in new automobiles being shipped by rail were jailed at Chattanooga, Tenn., the other day, reports H. Reid. Johnny Peters, 23, of Jacksonville, Ark., and Thomas R. Cook, 21, of Temple, Ga., were unable

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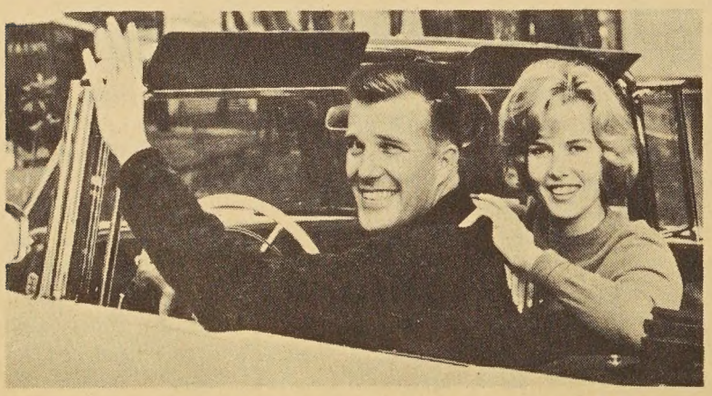

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to pay $5 court fines. Southern Railway officials said they had not prosecuted hoboes for some time but that since the introduction of new automobile-carrying railroad cars, "Weary Willies" have been damaging the interiors of new automobiles.

"June issue of *Railroad Magazine* is beautiful," writes Piero Romagnano, 42 Via P. Isola, Novi Ligure, Italy. "I have never seen anything in European railway literature to equal your article on 'The World's Fastest Train,' and the Louisiana Eastern photos are fine."

The first completely bilingual railway timetable in Canada's history has been published by Canadian National Railways, which is distributing 225,000 copies of the new 64-page booklet. While making train information more readily accessible to French-speaking patrons, the new timeable also illustrates the bi-ethnical character of Canada.

Containerized handling of mail by the Santa Fe Railway from Chicago and Kansas City to the San Francisco Bay area began on a daily basis last June. This new method of moving mail to the Bay Area is an excellent example of innovations developed by private carriers.

"I hope your magazine will run a regular Circus department," urges Paul Wissler, 5014 Melrose Ave., Hollywood, Calif. "What do other readers think?"

Chesapeake & Ohio has asked the Interstate Commerce Commission for permission to remove a pair of its lightly patronized passenger trains now reaching West Virginia and Virginia points, the *FFV* eastbound and the *Sportsman* westbound.

The new "super-collier" *Naess Cavalier* recently took on a world's record coal cargo of 39,007 net tons at the Norfolk & Western's Lamberts Point piers at Norfolk, Va. The huge bulk-cargo carrier exceeded by 466 tons the previous record made March 30 at the same piers.

Canadian National Railways have awarded a $2,500,000 contract to General Railway Signal Co., of Rochester, N.Y., for automation equipment for the CNR'S huge new yard at Toronto. Over three miles from end to end and more than a half a mile wide, the yard—actually two integrated yards—will have 119 classification tracks.

An Indiana Railroad yardmaster was arrested the other day at Hammond, Ind., because a train blocked a crossing so long that a girl was born in her parents' waiting automobile. Mrs. William Blankenship, 28, gave birth to the baby while her irate husband was trying to get police to clear the crossing so he could get his wife to a hospital.

Purchase of new motive power to cost more than $20,000,000 is announced by the Union Pacific. The order consists of 87 diesel-electric freight locomotive units to be used in the road's high-speed freight service; 75 of the units will be 2250-horsepower each, the other 12 being 2500 hp.

Wanted by Wm. F. Rapp, Jr., 430 Ivy Ave., Crete, Neb.: data on the history of railroad coal chutes, also pix.

"Congratulations on your fine August cover shot!" writes Alton Lanier, 2672 Green Meadows Lane, Atlanta, Ga. "It tops even the excellent June cover. I like it so much that I bought an extra couy of the magazine just to frame the cover. The article, too, was good. Bill Warden did a swell job."

A Chesapeake & Ohio Railway signal maintainer, Clarence V. Smith, 25, of Saginaw, Mich., has received a Carnegie bronze meadal for bravery and $500 for rescuing teen-age Richard Haller from drowning in the Saginaw River.

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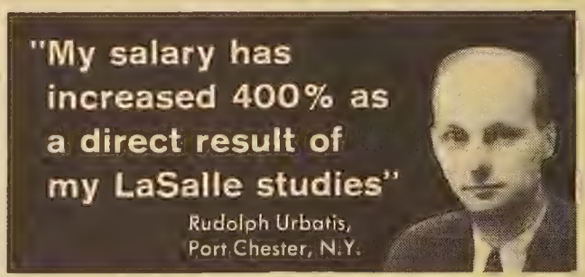

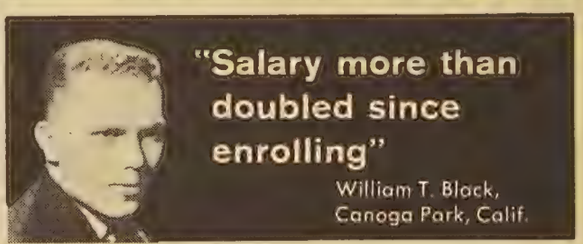

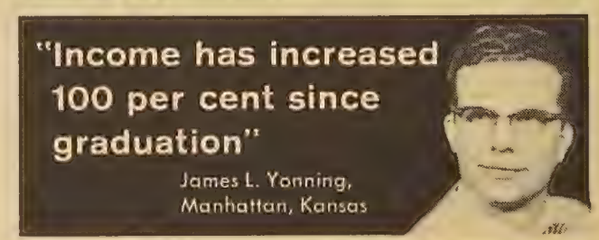

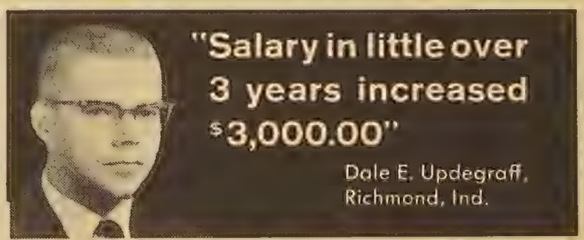

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NIGHT TRAIN

BY OLIVER TOWNE

Columnist, St. Paul Pioneer Press

David Plowden, New York City

THERE is something about riding a night train crossing the prairie that carries the absolute in the romance of America. It is adventure in nostalgia, the quickened pulse beat of excitement as the yellow headlight, swinging in arc, pours its light down the platform of a North Dakota city, the leviathan locomotive coasting by, its mighty engines throttled to a purr. The lights from the cars flick by, slower, slower, then halt.

The prow of the *Empire Builder* is flecked with the salt spray off Puget Sound, the earth of Montana, and snows of the Rockies. For a night and a day, it has pushed east across America and now pauses to marshal its strength for the final dash down a moonlit ribbon to the sunrise of home.

The platform echoes the sound of people on the move. Laughter from shadowy figures, cheery farewells. Lanterns swinging from porters' hands as they assist passengers up steps into the warmth of Pullmans and coaches. Rumbles of baggage trucks, piled with mail, mingle with the hiss of steam, spiraling between the cars.

Pacing impatiently, wind flapping his topcoat, the conductor looks at his big, gold watch. His arm swings in the timeless signal that has sent night trains into the darkness through the decades. The horn answers him with two short bursts. Steathily as a prowling cat, the train slides into motion, window lights flickering, faster, faster, faster. Then a blob of red light vanishes into the lonesome prairie.

Cached into seats, roomettes and berths, rooms and compartments, are riders of the night train. Locked in by steel and speed from the world whirling by them. Sitting in the club car, with its pseudo cocktail-lounge decor, they banter and buzz, talk and chatter. The delegates from Des Moines, the traveling salesman out of Seattle, the three couples with flushed faces on their way to a football game, the airman sitting at a desk writing letters, the couple, on a retirement holiday, radiating their new freedom like children on a lark. They sit at tables in their mental compartments and slowly the talk shifts back and forth across the aisle, diagonally.

They sit in the cozy cheer of the car and watch the little towns come and go, cold, clusters of light. Flashing by the windows in a blur, the diesel's horn in two part harmony calls out a warning hail and farewell—proudly, nostalgically, sentimentally for every heart that pumps faster behind the lighted windows of farms and villages at the midnight cry of a train.

And those lying in their beds will feel the shivery sound of the musical magnate, luring their minds to distant cities and shores.

In the half light of the locomotive cab, wavering at 75 miles an hour, the fireman, hunches over in his seat, peers ahead, straining to read the color of the block signals rushing toward him.

"Green board," he calls across to the engineer, who repeats the phrase, and inches the throttle lever out one more notch, pitching the throaty melody of the motors up an octave. As they round a curve, the fireman leans out of the cab window, the night air stabbing his face. His eyes roam back across the train, alert for the glow of a hotbox. For just a second he sees the speeding string of cars whose end is marked by a glowing green pinshead on the last Pullman. Then the train whiplashes into the straightaway.

From a darkened bedroom berth, a passenger sees the moon-etched landscape sweeping past. In the distance the harsh lights of a sleeping town. The muted shriek of the diesel comes back to his ears. The kaleidoscope registers briefly—the empty main street, the tavern signs still burning, the hotel neon flickering feebly, the tiny speck of orange in the depot and a glimpse of the lonesome telegrapher, looking up wistfully at the train hurtling by his window. The rhythm of the wheels is broken by a clatter over a switch. There is a lurch as the engineer urges his horsepower faster out into the prairie night. Behind him three hundred passengers sleep or doze fitfully.

Sometimes before dawn, a passenger wakes with a start. The train is motionless. Outside his compartment window, he hears the sounds of depot platforms in the night—voices without form passing by, baggage trucks clattering down the bumpy brick platform. "Write when you get there." . . . "Give my love to Aunt Sue." "B-o-a-r-d!" The lullaby of the wheels again. A brief interlude in the night. The sleeper dozes off, wrapped in the heat of the blankets, and wonders whose lives passed his window by inches. Yet they would never meet, probably.

Dawn traces the eastern horizon. The skyline of the city is silhouetted like a low mountain range. A few houses at first . . . then more . . . and from a train window, the traveler looks at the stereotyped spectacle of suburban America performing its morning ablutions, shaving, brushing teeth, filling coffee pots, in pin curlers and housecoats.

On the train a stirring and hustle; footsteps down the aisles; porters carrying luggage to the vestibules; bleary greetings across the coach seats; coats being put on. Roomette doorways open or hastily emptied, rumpled beds.

Nose buffeted by gales off the Cascade slopes, caked with the soil of Idaho, spotted by rains of the Great Divide, the dust of Dakota and Minnesota, the train stops with a sigh of steam, like a sprinter at the end of a race—across the prairie, through the struggles and sorrows, successes and slumbers of America—singing a haunting song of the night train.

Adventure Rides the

ORIENT EXPRESS

With pensive beauty facing you at the table, a meal in the diner of the *Orient* — or any train — is an experience to be remembered.
All illustrations in this article courtesy of Thos. Cook & Son

by Freeman Hubbard

Electric lights of a rainy Paris night spill shimmering pools on the station platform as the *Direct-Orient* waits for highball.

THE FIRST truly international train, the *Orient Express,* made its maiden trip June 5, 1883, from a flag-bedecked Paris station to a Vienna terminal gay with the French Tricolor and a large gonfalon bearing the double-headed eagle of the Austro-Hungarian Empire. It consisted of two elegant wooden coaches, stove-heated and oil-lighted, pulled by a six-wheeler with a tall stack but no pilot. This luxury train was owned and operated by Wagons-Lits Company, an international syndicate that controls most of Europe's sleeping cars, and it went into service on that date because a new 6½-mile tunnel, the Arlberg, had just been completed through the snow-capped Alps, providing a more direct rail connection between Switzerland and Austria.

Three months later the train's route was lengthened. Creeping across the plains of Hungary and mountains of Rumania, droning through tunnels and over bridges, the *Orient* bypassed Bulgaria to deliver its passengers to the Black Sea coast, where they embarked on a small steamer that carried them to minareted Constantinople (now Istanbul). The first trip was interrupted by festivities at every stop, including an invitation by Rumania's King Carol I for all of the passengers to be his guests at the royal palace in Bucharest, and it took six days and six hours. This was a fabulous event because it linked two worlds by rail, the West and the East, for the first time in history.

In 1888 the travel time was cut sharply by a treaty which Wagon-Lits signed with King Ferdinand of Bulgaria permitting the glamour train to roll through that Balkan kingdom directly into Turkey. Along the way it crossed seven international frontiers—which no other train before or since has ever done! This brings up an odd point. The *Orient's* route is determined not by railroad companies, as American train routes are, but by international treaties which the Wagons-Lits Company negotiated through diplomatic channels. You might almost think Wagons-Lits were a sovereign state.

Like all standard European trains, the *Orient* has a corridor down one side of each car and separate sliding doors that shut off the private compartments. In early days the compartments were hidden behind red damask curtains instead of sliding doors and each was

Many a secret tryst with romance and international intrigue has been held in the corridors and compartments of the fabulous *Orient Express.*

Wonder what these three girls were thinking of when they fell asleep on the Paris-Istanbul train? They are traveling second-class in *couchettes*, available only for overnight trips made by passengers of the same sex. Car used to be a troop transport.

A rare photograph of the *Orient Express* highballing through Turkey in 1910.

paneled in mahogany and lushly carpeted. Red damask also draped the windows and, even as far back as 1883, the train had showers. You could have recognized the swanky cars from a distance by the coat-of-arms painted on their royal-blue sides. Pedigreed dogs journeyed in style in a special compartment. Liveried attendants walked them on leash at station stops.

A gray salon coach, built for the presidents of France and visiting royalty, was coupled on occasionally for such personages as King Farouk and Queen Farida Zulficar of Egypt, the Aga Khan, Leopold of Belgium, Carol of Rumania, Ferdinand of Bulgaria and his son Boris III, the Pretender to the Spanish throne, and Marina, the Greek widow of the Duke of Kent.

Another ruler who rented this car on at least one occasion was an Indian maharajah traveling incognito with a harem of seven cuties, mostly Eurasians, whose gorgeous figures were clad in filmy negligee and whose faces were veiled. Each concubine was quite young, possibly a teenager. She wore a tiny diamond set in her right ear lobe and another gem in her right nostril. How she felt about sharing a man's love with other sexy females, each in a separate cubicle on the *Orient Express* rolling from Paris to the old City of Constantine for so many days and nights, is one of the mysteries of that mysterious train.

AN ASIATIC potentate, also nameless, is known to have had a private diner, regal in its splendor, coupled behind the gray salon coach for the exclusive use of his own party. Nobody else was permitted to enter either the royal car or the private diner while it was on the road. That is, nobody but the suave *chef de train* (conductor) when he had to pass through the train on official duties and the discreet waiters in livery who served the elite guests.

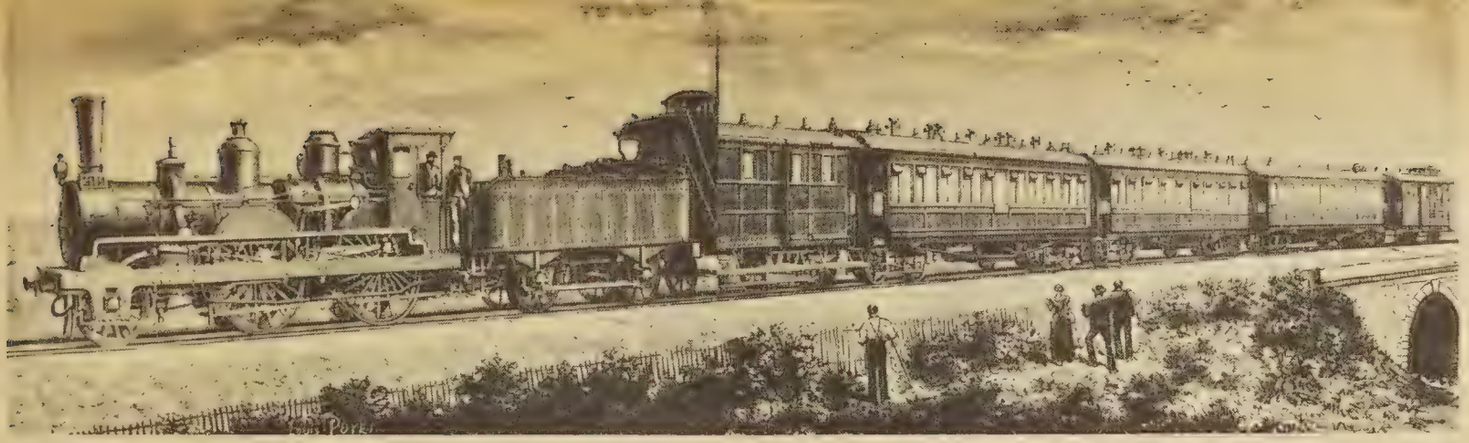
The sights that met the eyes of the *chef de train* and other men in the crew, particularly when the maharajah's harem was on tour, would have supplied racy material for a book of memoirs, but such a book will probably never be written.

One royal passenger, Boris of Bulgaria, was not only an enthusiastic railfan but also an expert locomotive driver. On his frequent trips by *Orient Express* the king liked to discuss the technical details of railway operation with crew members. His favorite pastime was to don overalls, climb into the cab of the *Orient's* steam engine, and take the throttle. Nothing pleased him more than to guide the world's most exciting train over the rails by day or night.

But eventually word got around that a royal amateur was handling the train and thus imperiling human lives. The French and Italian governments quietly gave notice, through their ambassadors, that it was forbidden while the *Orient* was chugging through their countries. This restriction made Boris unhappy. After that, when he rode the *Orient* he would wait impatiently until it reached Bulgaria, where his own word was law, before playing his choice role of engineer.

The *Orient's* diner was an epicurean dream: cozy leather chairs, gleaming plate-glass mirrors, sparkling silverware, Bohemian wineglasses, a long list of choice viands, and red and white vintage wines served on silver platters by waiters in light blue silk breeches, buckled shoes, and white gloves. There were seven different cupboards, each displaying the delicacies of one of the countries through which the express passed. What you ate depended largely upon where the train was at the time.

For instance, as the *Orient* left Paris the waiters began dispensing food and



The 1888 version of the same train consisted of 5 wooden cars, brightly painted and lavishly decorated, pulled by a 2-4-0.

drinks from the French cupboard. Near the Swiss frontier a French customs officer came aboard and locked the French cabinet. Minutes later, a Swiss customs man unlocked the Swiss cupboard with its tempting array of cheeses, jams, chocolates, and so on, and this procedure was repeated at all of the other borders. For dinner in any country you could begin your meal by picking from eight appetizers and not less than four meat dishes. But all that, in Kipling's words, was "long ago and far away." You can't get such service today on the *Orient* or any other form of transportation.

The *Orient Express,* which no longer bears that exact name, is really three different trains, each originating in Paris. For many years its most renowned run was called the *Simplon-Orient Express* because it used the world's longest tunnel, the Simplon, extending for 12¼ miles under the Alps between Switzerland and Italy.

Rail service through this bore began in 1906. The job of building it was tough because of hot springs in that vicinity and is said to have cost two thousand lives. The Simplon Tunnel story is an epic in itself.

Now known as the *Direct-Orient,* the long-distance express makes a 1,889-mile run between Paris and Istanbul by way of Switzerland and Italy through such historic cities as Milan, Trieste, Zagreb, Belgrade, and Athens.

Following a twisted route, the train enters Greece from Yugoslavia, goes into Turkey, into Greece again, and reenters Turkey near Adrianople. With eleven stops for customs inspection, its trip used to take 77½ hours but now takes longer because of delays for visa checkups in the Iron Curtain countries. Incidentally, at Montreux in the Swiss Alps it regularly passes the beautiful lakeside Chillon Castle, about which Lord Byron wrote a poem, "The Prisoner of Chillon."

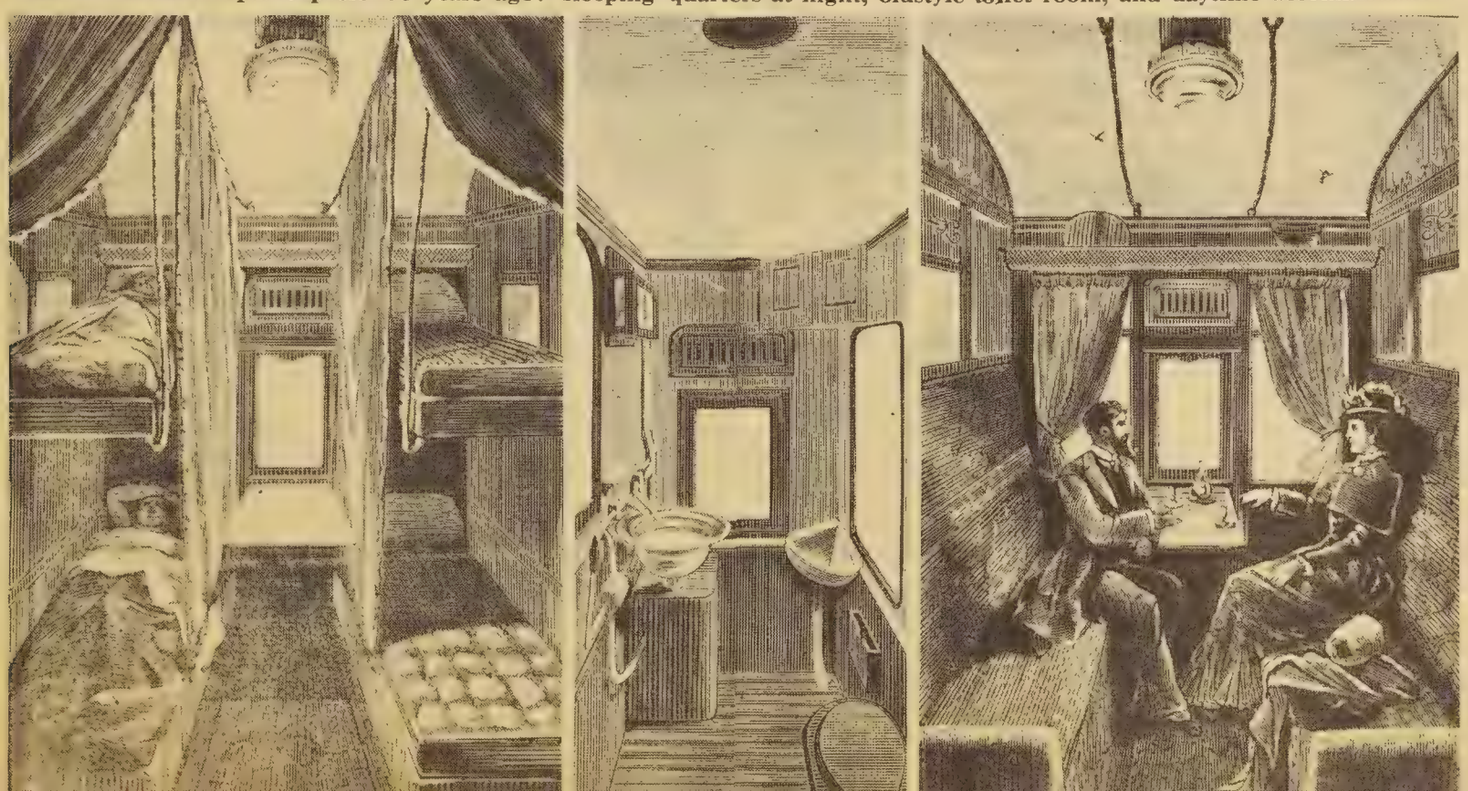
Another version of this train, formerly known as the *Arlberg-Orient Express* but now called the *Arlberg Express,* terminates its run at Vienna.

A third offshoot of the original *Orient Express,* which runs through Simplon Tunnel, is now the *Simplon Express.* It largely transports passengers between France, Switzerland, and Italy. During the summer it goes into Yugoslavia also, ending its run at Zagreb.

Thus the *Orient* is not a unified train. Its equipment and personnel as well as the foods and liquor it serves and the currency with which you pay your check are different at most, if not all, of the national frontiers it crosses. All seven countries supply men for the train crews. The conductors and waiters are required to speak at least three languages and carry money with them with which to make change for passengers in the currrency of the seven nations.

TRAVEL bureaus used to flaunt colorful lithographs urging the public to "Take the *Orient Express!* Oldest, Most Glamorous of the International Luxury Trains." Yes, adventure rides the *Orient.* Its corridors have swarmed with such diverse personalities as the Duke of Windsor, gangsters and smugglers, Toscanini, film stars, particularly Marlene Dietrich, Pope Pius XII

Paris-to-Constantinople express 70 years ago: sleeping quarters at night, oldstyle toilet room, and daytime accommodations.



The *Orient's* diner in 1890's was generally regarded as an epicure's dream. (Right) Recent version of same train stopping just inside Turkish frontier.

when he was Cardinal Pacelli, gamblers, Paderewski, diplomatic couriers, W. Somerset Maugham, Alpine skiers and mountain climbers, Sonja Henie, Baron Rothschild, and gorgeous mink-coated beauties who may have been courtesans, fortune-hunters, spies, or international jewel thieves.

One night as the *Orient* was passing through a lonely section near Trieste, passengers saw a fine-looking woman, sleekly gowned in black, pull the conductor's emergency cord, stop the express, and swing off into the darkness. Shortly afterward, another lady complained to the *chef de train* that her jewelry had vanished and so had the woman who shared her compartment. The conductor bent a sympathetic ear, made a routine search, and at the next stop he notified the police by telephone.

"On the *Orient Express,*" he said with a shrug, "such things just happen."

To mystery fans this "streak of varnish" suggests romance and intrigue. The *Orient* figures in such movie plots as Alfred Hitchcock's *The Lady Vanishes* and Carol Reid's *Night Train.* Also thriller novels by Grahame Greene, Eric Ambler, Georges Simenon, and Leslie Charteris. A whodunit novel by Agatha Christie, *Murder in the Calais Coach,* telling about a car which had come from Calais to join the famous train in Paris, carries this blurb:

"High in the mountains of Yugoslavia the *Orient Express,* speeding southward, was halted by heavy storms and huge snowdrifts. One compartment of the Calais coach was occupied by one of the most delightful of all detective characters, Hercule Poirot. In another lay the body of a murdered man."

This book has a semi-factual background. The *Simplon-Orient*, making its thrice-weekly trip from Paris to Istanbul, actually ran into a blizzard in a Turkish wilderness one day in 1930, after all but thirteen passengers had got off at regular stops, and was snowbound fifteen days. With a sharp rationing of food and fuel, everyone aboard was hungry and cold. Wolves howled outside. At length trainmen managed to burrow through the drifts, fight off the wolves, and bring back some coal and a side of lamb from the nearest village. That kept the passengers alive until Turkish soldiers in sleighs broke through the glistening white drifts with food and medical supplies. Finally, the glamour train chuffed into the former Turkish capital twenty days overdue.

The real snowbound situation was law-abiding, but Agatha Christie, who has often ridden the *Orient,* injected homicide into her novel, *Murder in the Calais Coach.* Such events are very rare but they actually have occurred on the *Orient* and other trains. The most baffling murder mystery on any American

Present route of the *Direct-Orient*.

train was the killing of a Missouri Pacific freight conductor in his own caboose some years ago. It would make a good subject for a whodunit novel.

So Agatha Christie did not stray too far from the truth. A few months after that Turkish blizzard of 1930, the *Orient* was entering a dark tunnel near Linz, Austria, when a muffled shriek rose above the rumble of wheels and click of rail-joints. Daylight streamed through the windows again. The seat of an inconspicuous Belgian man was vacant and the door to his compartment was swinging open.

The other occupants of that cubicle, two bearded and monocled men wearing pigskin gloves and two frightened-looking women, both smartly dressed, denied having seen anything unusual while they were in the tunnel. Later, when the victim's body was found beside the track, his inner coat pocket had been ripped out. You don't need a Sherlock Holmes to tell you that a man about to commit suicide or accidentally fall from a train does not first rip out his coat pocket.

Years afterward, a United States Naval officer, Captain Eugene Karpe, en route to Paris, vanished mysteriously from the same train, also in Austria, and his battered body turned up later beside the track. Verdict, probable accident. But was it? There are many people who don't think so. Another such case was a passenger seen hurtling to death off the *Orient* from a high bridge in the Swiss Alps. That would have made quite a story, but an intensive search failed to bring out the details.

TRAGEDY is only one of the Paris-to-Istanbul train's facets. An amusing incident is worth repeating. Turkey's late dictator, Kemal Ataturk, was so bent on westernizing his country that he suddenly abolished the traditional fez and is said to have slapped an Egyptian diplomat for wearing one in his preence. Thereupon the clothing shops and bazaars of Istanbul and Ankara sent rush orders for headgear to hatters all over Europe—for anything at all, just so it wasn't a fez. Well, you could hardly guess what happend. A conglomerate lot of derbies, straw hats, homburgs, high hats, berets, sun helmet, and caps of all kinds were loaded into the *Orient's* baggage cars for priority shipment to Turkey. Only the world's most famous international train could have carried them.

Despite the changes brought about by

One of the plushy older-type sleepers on the *Direct-Orient* train.

world wars, the fall of dynasties, and the remaking of international frontiers, you can ride the former *Orient Express* today, safely and easily, even through such Balkan countries as Yugoslavia and Bulgaria, after you have obtained the necessary visas.

Information about routes and other details is available from Thos. Cook & Son, world-wide agents for the Wagons-Lits Company. This 121-year-old travel service has 350 offices scattered all over the globe, including one at 587 Fifth Avenue, New York City.

Locomotives are changed at every border on the long exotic journey between Paris and Istanbul. Originally, steam engines handled the entire run, but now the power is predominantly electric, partly diesel and partly steam.

Even though the *Orient* has lost prestige in recent years it is still exciting and a great favorite with railfans. In a tiny magazine called *European Railways*, Hellmuth Frölich tells of riding it eastbound for many interesting miles behind a coalburning 4-6-0. He writes:

"The nearer the *Orient* got to the Rumanian frontier, the fewer the passengers that remained on the train. Only a few passed into the country whose railway system is now—and has always been—the least known in Europe (possibly excepting Albania with its few miles of post-war track) . . .

"Dawn was breaking peacefully as our train stood at Lokoshaza for visa-control. Lokoshaza has not always been a frontier point and it has, therefore, few tracks. The station building had been renovated, and is surrounded by squares of grass and flowers and flanked by birch trees. Two freights stood motionless in the yard and nothing was to be heard but the breeze whispering in the trees, a dog barking in the distance, and the hard-working chug of our locomotive. The latter was now at the head of a freight train going back to Hungary.

"As the *Orient* stood there, a far-away whistling of a locomotive could be heard—the same noise you hear from an American or Russian steam locomotive. Then the exhaust of a hard-working engine could be discerned, hauling a long and heavy freight and coming to the station on the track alongside ours. This same locomotive, No. 230.516, took over the *Orient* and hauled it tender-first to Curtici, the Rumanian frontier station . . .

"The journey continued over the steep Balota pass where our fine 2-8-4, No. 142.062, got two helpers—one piloting and the other banking—both of Class 150.10. It was very enjoyable to hear the three hard-working locomotives and I was looking first towards the front of the train and then towards the rear as we climbed higher and higher, leaving the Danube, tiny and twinkling, in the bright sunlight."

THE PASSING of the Rococo Age tarnished the glamour of the *Orient Express*. By the 1930's the lush old-style wooden coaches had been replaced

World's most exciting train passes the picturesque old lakeside Swiss castle about which Lord Byron wrote a poem, "The Prisoner of Chillon."

Companions on the long rail journey to the minareted old City of Constantine.

by the less romantic modern steel equipment—also painted royal blue with gilt lettering—and the fancy uniforms of waiters had given way to drab brown.

Later, when the troops of Hitler's Third Reich occupied France and other countries they seized most of the *Orient's* cars for their own use, but the French managed to save a few Wagons-Lits coaches by shrewdly using them to house war refugees.

When war ended, the Wagons-Lits Company reclaimed a few cars from all over Europe, refurbished them, and put the *Orient Express* back into service without its former grandeur. But occupation troops along the route made border-crossing increasingly difficult. Many passengers have been forced off the train for lack of the right papers. Often personal belongings are confiscated on a charge of smuggling. In Greece, ordinary boxcars were coupled behind the once-glamorous *Orient* and filled with soldiers to guard against Communist raiders.

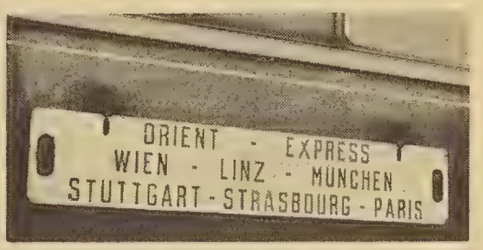
The situation became so critical that for years it was almost impossible for anyone except diplomats and some journalists to get the military visas needed to ride that train from Paris to Istanbul. At the same time, airliners were cutting heavily into the *Orient's* passenger list. Extra-fare trains were no longer the fastest, surest, and most fastidious mode of travel. By 1959 the number of passengers riding the *Orient* between Vienna and Budapest had dwindled to an average of one and half per train!

Finally, in October, 1960, the Wagons-Lits syndicate threw in the sponge insofar as operating the former *Orient Express* as a luxury train was concerned. The train is still running between Paris and the minareted old City of Constantine but on a more plebeian basis, and Wagons-Lits has relinquished control over rail service through the Balkans.

No other express could ever match the glamour and mystery this one used to have but will never have again.

Gone are the days when, as *Time* magazine put it, "Elegant prostitutes provided companionship for the long journey to the Orient." ●

Romantic night scene at the entrance to new stainless-steel sleeping car.



A celebrated name-destination plate.

Lady reads before going to sleep in her duplex compartment on the *Orient*.

110 Years of Moguls

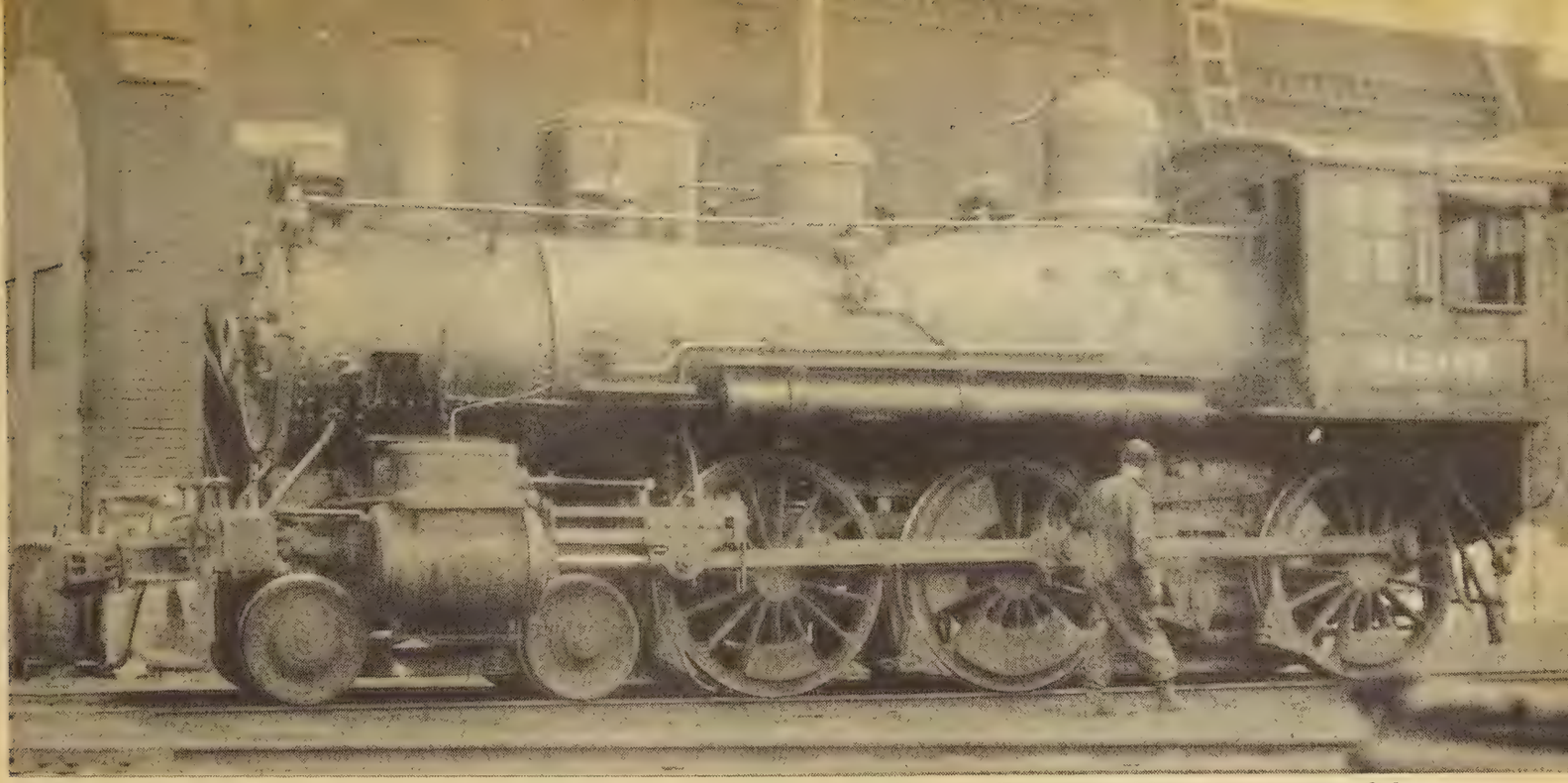
by H. L. KELSO and JIM HOLDEN

Mogul No. 565 was built by Alco in 1908 for the Lackawanna, was sold to the Dansville & Mt. Morris in 1936, and is now owned by Wm. Whitehead and operated on his tourist-attraction Black River & Western Railroad at Chester, N.J.
Jack Emerick, 200 South Terrace, Boonton, N.J.

DURING the great days of steam the Mogul chalked up countless millions of miles and would tackle anything — snow, mountains, desert, you name it. She was neither quaint nor colossal and seldom had more than two cylinders. Her wheel plan was simple: two pony wheels to hold up the powerplant, followed by six drivers. Often a Mogul's drivers were pretty well forward so that the heavy front end could help to give them traction.

Some roads used practically no 2-6-0's but this type moved a very large part of North America's rolling stock. To identify the 2-6-0 with the Mogul may open us to criticism. The argument has been advanced that the first 2-6-0's were not true Moguls. Philadelphia & Reading built the very first one, the *Wyomissing*, No. 23, in July, 1852, at its shops in Reading, Pa., under James Millholland's direction. She weighed a neat 60,525 pounds and had a rather odd boiler with a small intermediate firebox and two sets of tubes. Twenty-three was not the world's best steamer, even in those days, but performed so well that Millholland built seventeen engines of her type in 1852-'54, calling them the Pawnee Class.

The quibbling over whether or not



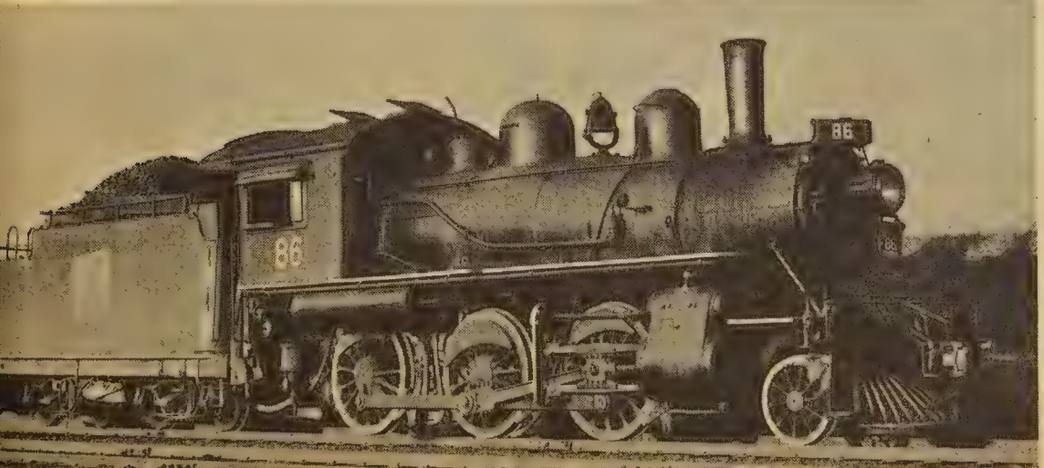
The Wabash had two Moguls which rolled up 55-year service records, but No. 107, Class H-7, pictured here, was not one of them.
Harold W. Plummer, 214 E. Melbourne Ave., Peoria, Illinois

the Pawnees were really Moguls is based on the fact that their pony trucks were back of the cylinders and bolted rigidly to the main frame. A rather fine point. Most locomotive historians regard all 2-6-0's as Moguls. Not too costly to build, the type was soon copied and improved upon by many builders, but its "finest hour" did not begin until about 1895, after more than two decades of development. Even today, a very few Moguls are still pounding the rails on industrial lines and tourist attractions.

We have already reported (Oct. '61) on the Southern Pacific's impressive Mogul parade in the Southwest. Another system which favored that type was the Great Northern, which inherited a fleet from the St. Paul, Minneapolis & Manitoba in the early nineties. Their Class D was admired particularly for its "cool" Brooks lines, Laird crossheads, and spoked pony wheels. The Northern Pacific also used Moguls, the earliest being 78,000-pound Baldwins, built in 1881 to burn lignite on Wootten grates eight feet wide. Their cabs rose high and awkwardly over the fireboxes, and they were among the homeliest Moguls that ever turned a wheel.

The Milwaukee Road went in strong for the Prairie type or 2-6-2, a glorified Mogul. Among the Western lines that were not Mogul-conscious at all you might mention the Western Pacific and the Chicago & North Western, whose rosters probably never listed a single 2-6-0. But we find two on the 1899 roster of the Spokane, Portland & Seattle: an '88 Baldwin and a '95 Brooks. Since the SP&S was owned jointly by the Great Northern and the Northern Pacific, those two engines may have been gifts. The Spokane International acquired two from the Buffalo, Rochester & Pittsburgh (now part of the Baltimore & Ohio system).

W. H. N. Rossister, 2421 Lakeshore Rd., E., Oakville, Ont. Canada
CNR 86, shown in service, is now displayed in park at London, Ont., Canada.



Coloradans heard plenty of Moguls crashing through their piny woods on both standard- and narrow-gage routes of the Old South Park Line. Ditto for the Denver & Rio Grande Railroad, where they hammered the rugged grades all through the 1870's—tough old mills that were later "retired" to logging railroads.

A famous Mogul arena was the Virginia & Truckee, which once negotiated the hill country from Reno to Virginia City and other red-plush towns of the fabulous gold and silver mining, days. Out of twenty-seven engines, seventeen were Moguls—mighty keen ones, too, since Superintendent Yerington demanded clean power for the week-end traffic. Friday was bath and polish-up day; every time the engineers and firemen had a few minutes to spare they would be out there scrubbing and tallowing. It is said that a later head man, A. M. Ardery, had just one question to ask a redfaced hogger who had smashed a vegetable wagon at a crossing, and it wasn't whether or not anyone was hurt. He demanded, "Did you, or did you not get a scratch on my engine?"

As the gold and silver played out, these glittering horses began to go elsewhere. Four traveled up to British Columbia in 1881 to help build the new railway there and then, it is reported, the Canadian Pacific wouldn't bid on them "because they were worn out." Sold to the Intercolonial Railway in Nova Scotia, those "worn out" coffee pots

Photo by Jerry Hanson

(Above) NYO&W No. 277. (Ieft) Ex-Canadian Collieries 2-6-OT No. 17 is now being operated by Puget Sound Ry. Historical Association on a track at Snoqualmie, Wash.
Stephen D. Maguire, 1411 River Rd., Belmar, N.J.

were still shuffling along briskly forty years later when the Canadian National took over the Intercolonial. Today a handsome Mogul named *Glenbrook* stands at Carson City, Nevada, on permanent display. Baldwin-built in '75, she had been hauled up the Sierra slopes by ox teams to draw tons of mine timbers out of the woods.

The Canadian Pacific did buy some Moguls, and built fifty at Montreal from drawings made by Francis R. F. Brown. Like most Canadian steamers, they were clean of line and smooth of dome. Weight was 100,000 pounds, and drivers and cylinders were about average, but Brown increased the boiler pressure from 160 to 180 pounds and devised a stronger method of staying the crown-sheet and a new stack. They *steamed.* Brown was an able engineer who worked out 150 engine designs for the CPR.

The Mississippi Valley saw a lot of Mogul traction on the Burlington, the Illinois Central, the Wabash, and the Vandalia (now PRR), and somewhat less on the Missouri Pacific, the Chicago Great Western, the Cotton Belt, the Minneapolis & St. Louis, and the Chicago & Alton. We remember the Alton's magnificent No. 333, with slide valves, twin pumps, and the bell perched high on the smokebox. What a locomotive! After years of freight work she became the Baltimore & Ohio's No. 2415, and as recently as 1946 was sold to the Manchester & Oneida, a then-prosperous Iowa short line. She proved too heavy for M&O track, however, and after eating up her value in derailments was given to the blow-torch—but what a thrill she must have afforded the people of Manchester every time she blasted into town!

One of the last Moguls built new for a common carrier was that of the Green Bay & Western in 1924. As far as we know, the *very* last was the one Baldwin built in 1925 for the Yosemite Valley line in California.

Although the 2-6-0's never pretended to be anything but efficient freight haulers, the Burlington as early as 1888 was buying them for heavy passenger traffic. Using 68″ drivers in place of 62″ drivers, a fleet of Baldwins went into speed tests on the racetracks between Chicago and Galesburg, a matter of 162.5 miles. Five types were compared: a simple-expansion Mogul with 62″ drivers, a sister with 68″ drivers, a compound Mogul with 62″ drivers, a new Standard (4-4-0), and a Vauclain compound Ten-wheeled (4-6-0). The results are something to keep in mind.

With ten cars or less, the 68″-drivered entry made the best time; but with twelve or more cars the 62″ simple Mogul beat them all, whisking, a train from Burlington to Chicago in 203 minutes, average 65.5 miles per hour. For 45 miles the average was 73.6. Yet the last of the Q's passenger Moguls (Baldwin '99) had 72″ drivers. They were big fellows of 143,700 pounds carrying steam at 200 pounds, and they rank with the speediest 2-6-0's of all time. Many a day we watched them from the cab of an engine on a parallel track and there's no question about it—they really performed. True, they were rather squat and clumsy, bringing to mind the "pigs" which roamed the old Mackinaw Division of the Michigan Central, the fat engines with blunt snouts built by Schenectady in 1887.

A famous stamping-ground of the 2-6-0 in the Midwest and Mississippi Valley was the Illinois Central, a large coal-hauler with many miles of level and straight iron. By 1890 the IC was listing 473 coalburners on its roster, 141 of them being 2-6-0's. Seven years later the number had grown to 256, all freighters, and these ran on and on. As recently as ten years ago the IC still had seven in active use. However, the Mogul was outnumbered by the Mikado (2-8-2), of which the Illinois Central owned 444.

Speaking of long life, in 1940 the Wabash had 55 Moguls, two of which were to roll up 55-years service records. Nos. 573 and 576 were heading trains on the Bluffs-Keokuk branch as late as 1954—a cheerful sight to fans who caught them charging along in tandem with a string of cars, their beautiful smoke plumes curling overhead. Today you'll find No. 573 on permanent display at the St. Louis Museum of Transport, a gift of the Wabash.

The largest 2-6-0's before the Espee built their giants of 1929-'30 were the Vandalia's at 187,000 pounds. With twenty seven such husky powerplants on level trackage, the Vandalia moved considerable tonnage, including huge passenger trains, as you might gather from reading "Carload Andy" Ospring's article in April '62 *Railroad Magazine.*

Further east we found Moguls busily pounding the rails of the Lackawanna (now the Erie-Lackawanna), having displaced the Ten-wheeler in 1870. Four mighty Moguls came from Cooke and five from Dickson, all such good performers that the Lackawanna kept operating Moguls till 1892. Their stable of 2-6-0's came from many builders—Cooke, Dickson, Danforth, Baldwin, Norris & Sons, Rogers, and the New Jersey Locomotive Works, besides their own famous shops at Scranton, Pa.

In 1882 the Lackawanna began to build 2-6-0 culmburners at Scranton with 19″ cylinders and 69″ drivers, culm being a hard-coal powder low in cost. All had Wootten fireboxes, all were Camelbacks with the cab astride the boiler, and all were fast. With their thirty-six soft-coal sisters of the same dimensions, they hauled redball freight until 1912 and then bowed out to Paci-

fics. Many of the Lackawanna fleet bore Indian names like *Meenesink, Pequest,* and *Syngack,* so it surprised the yardmen when one arrived from Cooke bearing the name *Edith.* Relatively few engines have carried feminine names—so few that this exception has long been a puzzle. *Who was Edith?*

Another satisfied customer was the old New York, Ontario & Western, which started with seventeen Moguls shortly after 1900, all Camelback hard-coal burners with 69″ drivers. Fast with freight in the winter, they handled summer vacation trains smoothly.

Not all of the Lackawanna's neighbors favored the Mogul, and this went for the Lehigh Valley, the Jersey Central, the Erie, and even the Reading, which had built them first. While Moguls were scattered on short lines throughout the South they were used little or not at all by the Atlantic Coast Line, the Seaboard, and the Southern.

In Connecticut the financially-shaky New Haven pressed its many 2-6-0's into passenger service right up to the day the diesels came. As of 1907, the line had 240 average-size Moguls of Class K-lb with 20x28″ cylinders and 63″ drivers, all two-cylinder but one, a tandem compound which Schenectady had bolted up in 1900 along with some compound 0-6-0 switchers.

In New Hampshire and Vermont, so many Moguls rattled the rivers across and through the woods that the region became known as "Mogul country." It is a region of white church spires, sparkling rivers, clean-looking farms, and covered wooden bridges. There are, of course, towns and factories, but not the activity which had been anticipated in the days when the Concord, the Boston & Lowell, and the Boston & Maine were battling for control.

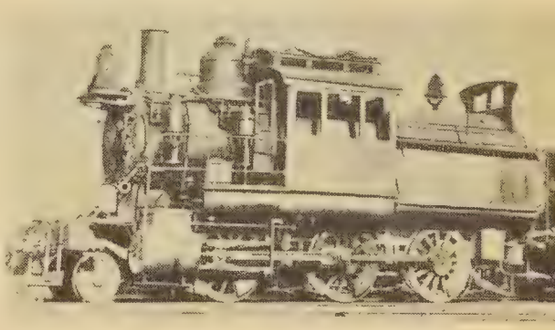
A local railroad historian, Elwin K. Heath of Barre, Vt., reports: "The Central of Vermont had a total of forty-four Moguls, starting in the late '70's. Twelve were built in their own shops at St. Albans and Northfield. Hinkley outshopped one in 1879, fifteen came from Baldwin, ten from Rhode Island, and five from Alco at Schenectady. A heavy Mogul bought from the Grand Trunk in 1900 ran until 1939, when a collision with Boston & Maine's 3632 sent her to the scrap pile."

Maybe some readers will supply details of this grim event which ended the Central Vermont's Mogul era. The Mogul's place on the CV was taken by Consolidations, and after 1928 by some big (2-10-4) Texas types, the heaviest rigid-framed locomotives ever to thunder across New England.

In 1933 the Boston & Maine listed 140 Moguls, all good-looking steamers built by the Manchester Locomotive Works between 1895 and 1910. All but one were of Class B-15 with 63″ drivers, 19X26″ cylinders, and tractive effort rated at 25,300 pounds. Many were still competent train-pullers on the day the diesels took over. You'll find one on exhibition today at South Carver, Mass., home of the operating two-foot-gage Edaville Railroad.

The B&M has a network of branches —fragments of one-time through routes—which Mogul power served economically until 1953. Longest branch was the Claremont, which ran west from Concord, N. H., to the Connecticut River Valley but carried no through trains. A daily freight chuffed up to Bradford and then backed home to Concord. At the other end two Moguls lived in a three-stall shed at Claremont Junction and two daily "varnish" trains wound 57 miles eastward along the

Sydney & Louisburg No. 42, built by Schenectady in 1899, rebuilt as Mogul in 1946, sold to Acadia Coal Co., Stellarton, Nova Scotia, seven years ago.



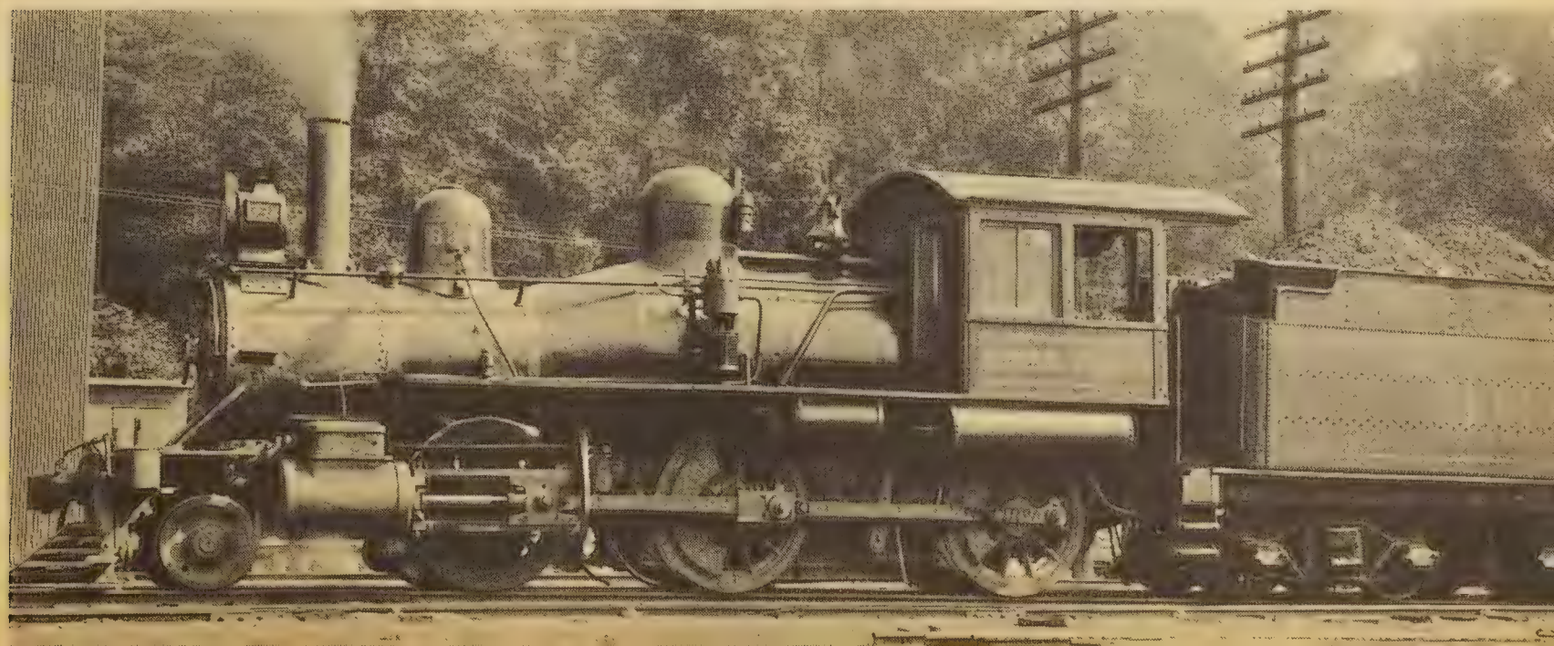
This Erie 2-6-0 Camelback switcher, No. 742, was originally numbered 35.
Collection of Warren D. Stowman, 2011 W. Godfrey Ave., Philadelphia, Pa.

winding Sugar, Warner, and Contoocook rivers. It was possible to ride the green plush along the shores of beautiful Lake Sunapee, listening to the drone of wheel-clicks through open windows and enjoying the melodious chime whistles for which the Boston & Maine used to be famous. This idyll came to a sudden close in 1953 when the last B&M branch lines were dieselized, as Phil Hastings wrote in *Railroad Magazine* a few months later, and passenger service faded ingloriously to one daily round trip by gas-electric car.

In its early days the Claremont branch could claim *four* covered bridges, but they dropped to three on the day of the Moguls' last run. Not long after the

Collection of Karl E. Schlachter, 10 Bullock Ave., Barrington, R.I.

The Central Vermont kept its steam power clean and well polished. Mogul No. 334 was photographed at Burlington, Vt., in 1914.



When the last train pulled into Woodstock, Vt., in the early twilight of April 15, 1933, it marked not only the end of the 17-mile Woodstock Railroad but also, we think, of a quaint old American custom of painting a hogger's name on the side of his cab.
Freeman Hubbard

train had chuffed through, the old wooden span over the Contoocook burned down to bent rails.

Most popular Mogul branch was the 52-mile Peterboro line north out of Worcester, a one-day journey. Two hours at Peterboro gave the passengers time to picnic while the crew turned the 2-6-0 on the "armstrong" table and filled the tank from a trickle of water. Then there was the Hillsboro branch west out of Nashua with two covered bridges and ten miles of better than two percent grade. Other branches sprouted from Manchester and Ayer, Mass., most of them served by two or three freights per week.

Much lore centers around the Mogul. The last run of the 17-mile Woodstock Railroad in Vermont, with a Mogul numbered 4, the *H. H. Paine,* was especially momentous. Freeman Hubbard recalls that as a young fellow he rode the cab on that run. It was the day before Easter in 1933. The Woodstock had kept up the quaint early-day custom of lettering the hogger's name on his cab, and white-haired Harry Paine was retiring in a blaze of glory. Hubbard believes that the 4-spot, which the Vermont shortline had bought from the Bangor & Aroostock, was the last engine named for her runner to operate on any rails.

During most of the run through the snow-covered granite country that day Engineer Paine was silent, but as they climbed Shallies Hill the drivers began to lose traction and he showed impatience. He had wanted so much to make his final run perfect. Time and again the exhaust blasted as the wheels failed to grip. Finally the exasperated hogger had to stop, break the train, and double the hill.

"They greased the track on this hill," he grumbled. "Worst thing I have ever known in forty-nine years of engine service!"

Local men had opposed the abandonment, he knew, but such mean revenge was beyond his comprehension. Mr. Paine's chagrin soon lost its edge as he responded to people who stood waving outside their snow-roofed houses nearby and far down in the valley.

"Passing motorists honked out of respect for the dying railroad," Hubbard recalls, "and halted to watch the Mogul *choof* mournfully toward the end of her journey. For the last half-mile the whistle blasts rang through the twilit hills and the engine-bell tolled steadily. When we got to Woodstock station the whole town was lined up on the platform, waiting quietly for the familiar sight of a train steaming into town—a sight they would never see again! It was a sincere mark of respect for a beloved railroad and a retiring engineer whom everybody knew. A tribute, too, to a famous old Mogul."

Before long, the gleaming rails were ripped up and the once-proud *H. H. Paine* was left to rust away in the weeds with her hogger's name still on the cab in large, fading, gilt letters.

For a few years more, you may catch sight of a lone 2-6-0 churning along in some remote area, such as No. 6 of the Magma Arizona Railroad east of Phoenix.

A few were toiling recently on industrial lines, including one at Maccan, Nova Scotia, operated by the Maritime Coal, Railway & Power Co., and on at least one tourist narrow-gage, the Cherokee Wonderland Railroad in North Carolina, where a Mogul built by Davenport in 1901 was restored by her owner, Arthur Lasalla of St. Francisville, Louisiana.

A few 2-6-0's, long out of service, have permanent value as relics. For example, the Pennsy is keeping No. 9864 (Cooke, 1916), from the old Waynesburg & Washington narrow-gages, in its museum at Northumberland, Pa.; but there is some talk about giving her and other Pennsy steamers to the Smithsonian Institution at Washington, D.C., as soon as a building to house them has been completed. Here is a partial list of Moguls that, as this is written, were still operating. Due to the swift march of events, it will need correction.

Alabama: Mobile & Gulf No. 97; Arizona: Magma Arizona No. 6 Illinois: South Shore (industrial) No. 507; Michigan: East Jordon & Southern No. 6; Missouri: Bevier & Southern Nos. 109, 110, and 112; North Carolina: Cherokee Wonderland. a narrow-gage Mogul; Nova Scotia: Maritime Coal, Railway & Power Co., an industrial Mogul; Oklahoma: Dardanelle & Russellville No. 9; South Dakota: Black Hills Central No. 9; and Texas: Angelina & Naches River No. 208.

We may never again see red-faced hostlers or laborers pushing a Mogul around on a hand-operated turntable nor hear the resonant exhaust as she pulls a clattering string of cars through an old wooden covered bridge. These things were good while they lasted, and that was for more than a century. •

INTERESTING RAILFANS

Number 10: Fred A. Stindt

Fred and one of his pets, NWP 94.

GONE are the British Empire, the 5-cent cup of coffee, the weekly *Saturday Evening Post,* and the old iron horse; but Fred A. Stindt, staunchly immovable in a changing era, is still chairman of the Pacific Coast Chapter, Railway & Locomotive Historical Society, which he has been continuously since 1949 and probably will be until the year 2000.

Tall and erect as a Lombardy poplar (6 feet, 2½ inches), Fred has reached age 50 with an unwrinkled face and a full head of hair, albeit graying, and no pot-belly. If he were using a hair-color salve you'd guess he was about thirty-eight.

Doug Richter describes him as "a highly-organized, detail-minded individual." Francis A. Guido, publisher of *The Western Railroader,* to which he contributes now and then, told us: "If I devoted half the time to railroads that Fred does, my wife would probably throw me out of the house. His own pretty wife, Jane, is no railfan, while the Stindt children, Judy, Freddie, and Suzie, just manage to bear their dad's preoccupation with railroads."

Fred was born in California on October 31, 1911, the son of a German sailing-ship captain. Shortly after graduation from an engineering college, he hired out to Matson Navigation Co. and for the next ten years traversed the Pacific sea lanes.

"I covered more than a million miles by salt water," he muses, "but every time I hit port I would head for the nearest locomotive terminal to take pictures, because the railroad bug had bitten me at an early age. For years I was chief purser on luxury liners. Today I'm a dry-land executive with the same company."

In 1927 he took his first engine picture, the SP Eight-wheeler 1460. Thrilled, he vowed to snap every steam locomotive left on the Southern Pacific—a feat he completed six years ago, with the 2865—and has also shot 700 SP diesels.

"My first love," he admits, "was the Northwestern Pacific and my favorite photo, taken in 1935, shows NWP No. 9 (Grant, '83). I wish I could have bought that 4-4-0. She would have been a valuable item for the R&LHS collection of railroad equipment soon to go into the Railroad Museum at Aquatic Park, San Francisco."

One summer day in 1929, on his first trip to Roseville, Calif., he became so excited at seeing his first "Malley" cab-in-fronter that he ran half a mile to shoot her, found there was no film in his camera, and promptly fainted from 110-degree heat. Another railfan revived him by dragging him under ice-water dripping from a reefer.

At Honolulu, Fred prevailed upon the Oahu Railway management to pull out their No. 111 (ex-Pacific Coast RR.) from under a shed so he could snap her picture. She was such a mess that he borrowed a headlight, lamps, and other accessories to shape her for the portrait. The roundhouse force pitched in to help while a vice president rushed home to grab his camera.

In recent years Fred has written booklets on the SP, the NWP, and the Oahu, besides co-authoring *Locomotives of the Western Pacific* and being instrumental in getting *High Iron Holiday* and *Central America Holiday* into print. He also put together a 25th anniversary booklet for the Pacific Coast Chapter and is currently writing a hard-cover NWP history.

The booklet, produced in conjunction with *The Western Railroader,* has 48 pages, 5½x8¼", with a wide variety of good photos, mostly steam railroading, and should delight railfans in general, not merely R&LHS members. Available from the author, $1 a copy.

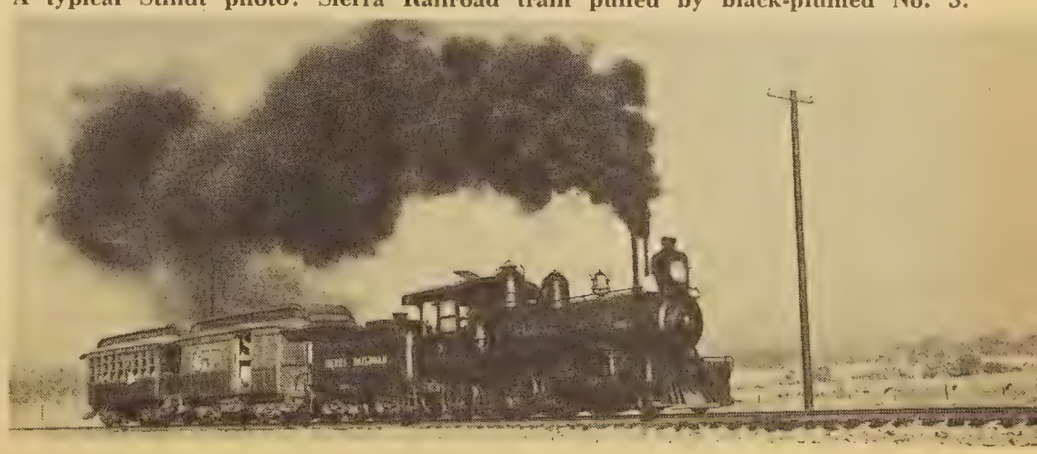
As chairman of a group which now boasts almost 300 members, he has planned over 100 fantrips, some lasting two weeks; has spark-plugged many railroad celebrations, and helped to get the air-conditioned observation-lounge, chair car, and coach for group trips.

Fred lives at 978 Emerald Hill Road, Redwood City, Calif. He never smokes and he dislikes "women with long cigarette holders, jive music, and railfans who write letters requesting prints without pay." Another pet peeve is "railroad managements which go out of their way to clobber passenger service."

Commenting on "The Vanishing Passenger Trains" in our June issue, he says: "I'm afraid your author is right—the end is just around the corner. There might be some hope if a strong new Federal body—not the present ICC with its pushcart methods—could induce all the roads to cooperate in a program of service and connections."

(No. 11 will be Rosemary Entringer.)

A typical Stindt photo: Sierra Railroad train pulled by black-plumed No. 3.



Rollcall of Pennsy

by SY REICH

All photographs from the Pennsylvania Railroad

AT THE TURN of the century, the only direct rail access to New York City was over the lines of what was to become the New York Central System. Passenger trains of the New Haven Railroad and the Central terminated at Grand Central Station. The Central's cross-country competitors, the Pennsylvania, the Erie, and the Lackawanna, terminated their runs arcoss the Hudson River from New York City.

Determined to end this competitive advantage, the Pennsy began building its now-important terminal on the west side of Manhattan, to be used also by its subsidiary, the Long Island Rail Road.

This project required that tubes be built under the Hudson. Since the terminal's coach yards were to located along the LIRR at Sunnyside, the Pennsy's trains would use East River tubes also to gain access to these yards.

For the proposed underwater tunnels and underground station, a new form of motive power was needed to avoid the difficulties of operating steam engines in enclosed locations. So, following the lead of Baltimore & Ohio electrification in Baltimore and the more recent electrifications of the New Haven and the Central, the Keystone Road decided to electrify its New York terminal area with the tried and proven 600-volts DC, using a third rail.

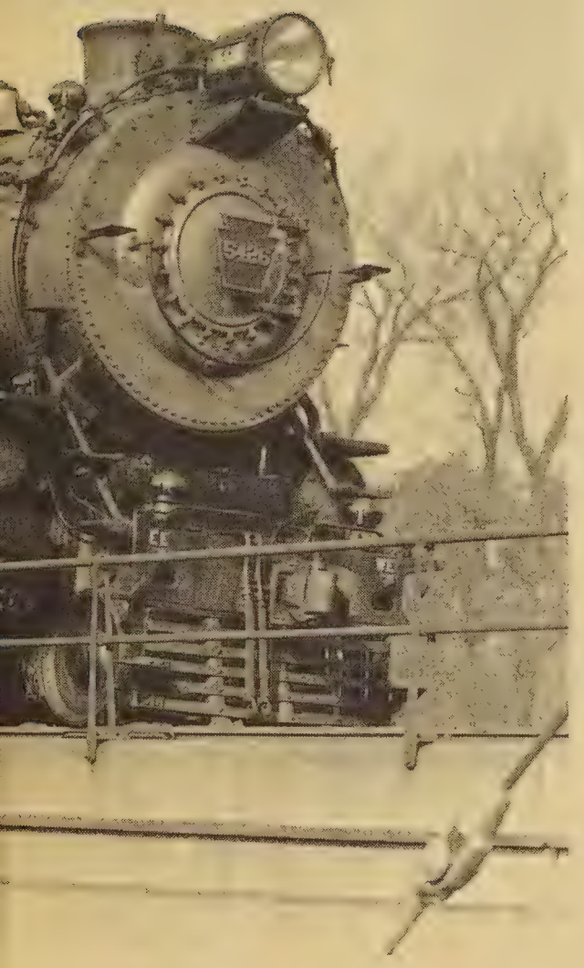
However, Pennsy engineers recognized the promise of the then new-fangled 11,000-volt, 25-cycle AC catenary system which the New Haven was just getting off the ground. The Pennsy provided sufficient clearances so that the electrification could be extended beyond the New York terminal area with the high-voltage system if it were proven successful. But 35 years later, when catenary was strung for the AC system, extensive reconstruction of the tunnels was still necessary.

With typical Pennsy thoroughness, before ordering any electric locomotives they conducted a series of tests to arrive at the best design. When you consider the relatively short length of electrification and the small number of locomotives required, compared to the vastness of the Pennsy's empire, you can appreciate the genius of those pioneers.

Their experiments led to a locomotive whose design was to endure through two world wars, a power machine which would serve two railroads under conditions unlike those originally conceived.

On August 20, 1905, the Juniata Shops built three locomotives for the tests, the first of what would become a long line of electrics. This unit was numbered 10001, named *Phoebe,* and classed AA-1. A-building at the same time— though not officially outshopped

Electrics



The first GG-1. No. 48000, poses besides K4s No. 5426 in Philadelphia.

until the following month—was unit 10002, also Class AA-1 though of different design.

These units, built in partnership with Westinghouse, hit the rails in June, 1906, hauling trains over the Long Island.

EXTERNALLY, they did not look much different from the many box-cab interurban freight motors that were then burnishing the light rails of electric freight lines. But since they were to pull heavy Pullman trains, they were considerably larger and heavier.

Phoebe weighed in at 175,100 pounds. Her partner tipped the scales at 195,-200. Each unit had two non-articulated four-wheel trucks with all axles driven. *Phoebe* had four geared motors of 350 hp each. No. 10002 had one truck equipped with two gearless motors of 320 hp each, supported from the main journals and independent of the truck frames, and the other truck equipped with two 300-hp motors fastened to the truck frames. Drivers were 56″ for all axles on both locomotives. These units represented the best contemporary practice for mounting and springing the traction motors of electric locomotives.

Both units were broken in on the LIRR. Meanwhile, Baldwin-Westinghouse, the Pennsy's traditional suppliers, were building a third test unit, No. 10003. This one departed from previous design in that, instead of being a boxcar with electric motors, it was a steam-locomotive type with electric motors. The design of No. 10003's frame followed the best steam-engine practice and resembled the Pennsy's then-current 4-4-0's.

This unit had 72″ drivers operated by two motors of 375 hp each connected to the driving axles on the gearless-quill principle. No jackshaft or side rods were used. The 10003 weighed 140,000 pounds and could exert a maximum tractive effort of 40,000 and a maximum horsepower of 1600. Unlike locomotives built by the PRR for operation on 600-volts DC, this unit was built for 11,000-volts, 25-cycles AC, the system which Westinghouse was then promoting.

The 10003 was tested October 11, 1907, near Clayton, N. J., on specially-prepared tracks of the West Jersey & Seashore, to determine which electric-locomotive design would be adopted. Along with *Phoebe* and her two sisters, three other locomotives were tested at the same time and place: New Haven electric 028 and two Pennsy steamers: No. 6034 (4-4-0, Class D16B) and 6020 (4-4-2, E-2).

These trials were to reveal both superiority of design with respect to performance and which suspension system would produce the best ride. Also which design did the least damage to track and wayside structures. The tests were made on all locomotives at 32, 45, and 64 miles per hour. Top speeds were 85 mph by the 10003, 82 by the 6034, and 95 by the 6020.

Both steamers performed well. *Phoebe* did badly but the 10002 was even worse, both tracking poorly at speed and damaging the track structure quite a bit. New Haven's entry was a good performer but tended to wander on tangent track. The New Haven corrected this tendency later by adding pony trucks. Best performer of all was the 10003, with the steam-locomotive design frame and suspension system.

The trials indicated also that the best-riding locomotive would be the one with the highest center of gravity. Their results had a profound influence on PRR electric-locomotive design.

Nos. 10001 and 10002 were later renumbered 3950 and 3951. Still later, *Phoebe* became the Long Island's 323. (But why was the name *Phoebe* used?)

FROM THESE tests the new DD-1 emerged. The locomotive was a box-cab design which was then standard for electric power. But unlike other contemporary electrics, instead of utilizing trolley-car principles for truck design and motor mountings, the DD-1 had a steam-locomotive type frame and running gear. To minimize the maintainance cost a single powerful motor was used to drive both axles the motor was mounted on the locomotive frame above the running deck instead of between the axles. This choice was dictated by the size of motors then available and by the desire to keep the center of gravity high so as to improve the riding characteristics with less wear on track.

Thus the Pennsy adopted a design very similar to 10003 but coupled the motor to the drivers by side rods and a jack shaft like the steam engine method. Since the electric motor produced no reciprical motion like that of the steamer's pistons, the driving mechanism could be balanced so there was no dynamic augment—the tendency to produce hammer blows on the rail.

Initially, four such units (two locomotives) were built in 1909 and 1910 and classed DD odd. They carried numbers 3996-3999, road numbers 32-33. Each unit contained one Westinghouse 315 motor which produced a continuous rating of 1580 hp and was capable of exerting a continuous tractive effort of 10,800 pounds and a maximum t.e. of 66,000. Each locomotive weighed 332,000 pounds and could reach a top speed of 54.8 mph.

On May 7, 1909, an order was placed and thirteen months later the first batch of standard DD-1's was ready to roll. They were numbered from 3952-3995 and from 3932 to 3949, with road numbers 10-31 and 34-42. Like the DD odds, each unit had a (2-B)x(B-2) wheel arrangement. Each was equipped with the improved Westinghouse 315A motor and weighed 313,000 pounds of which 208,000 were on drivers and could exert a tractive force of 50,000.

These new 4000-hp machines, with trains could reach speeds greater than 60 mph. PRR built their mechanical parts at Juniata and Westinghouse installed the electrical equipment. Electric steam-heat boilers provided for train-heating. In tests on the Long Island's Rockaway branch they proved their worth by hauling six-car trains at 63 mph.

At length the big moment came. New York's new Penn Station was officially opened November 27, 1910, and DD-1's began hauling through passenger trains into Manhattan!

The motive-power change from steam to electricity was made at Manhattan Transfer, a station built especially for this purpose in New Jersey. Four minutes were allowed for the changeover, but it was done normally in three—and two was considered the record. The careful experimentation which the Pennsy had undertaken paid off when operating figures for the first four years of electric operation were compiled. During this period the DD-1's covered 3,974,746 locomotive-miles with only 45 failures and 271 detentions to trains. That is, 88,320 locomotive-miles per detention, an excellent record.

AFTER AC electrics had taken over the jobs of the DC DD-1's, many older units were turned over to Long Island for third-rail operation. Perhaps the most famous use to which the island road put the DD-1's was hauling excursion trains from Penn Station to the site of the 1939 World's Fair at Flushing Meadows. Passengers arriving from the West changed trains at Penn Station for a quick, comfortable ride out to the Fair behind locomotives built in 1910-1911. A far cry from the then-future monorail at Seattle. but much more efficient!

Since then all DD-1's, except the two units maintained for wire-train service in the New York tunnels, have been scrapped.

With the New York terminal operation running smoothly, Pennsy engineers directed their attention to other electrification projects: Two presented themselves. First was the extreme congestion of suburban services in the area of the old Broad Street Station at Philadelphia. The engineers also had to do something about tough mountain grades on the main line between Altoona and Johnstown.

Electric operation of Philadelphia suburban service from Broad Street Station to Paoli began in 1915. Electric service using the then proven 11,000 volts, 25-cycle, AC system was extended to Chestnut Hill in 1918, to White Marsh in 1924, and to West Chester and Wilmington in 1928. Later these lines became part of the general eastern electrification.

To evaluate the possibility of electrification of the Altoona grade, PRR built a locomotive in 1917 at the Juniata shops using Westinghouse electrical equipment. They classed her FF-1, since she had a *1-C+C-1* wheel arrangement, and numbered her 3931. she was the first articulated electric locomotive the Keystone Road owned and was also the last—until the GG-1's were built.

Designed for mountain grades, this unique single-unit machine was similar to a two-unit Norfolk & Western type built for similar service. The PRR engine utilized single-phase, 11,000-volt, 25-cycle, AC current, converting it to three-phase current in a rotary converter driven by a synchronous motor.

The three-phase current operated squirrelcage AC traction motors which required no commutators. Connections were provided for two constant speeds, 10.3 mph and 20.6 mph in series and parallel respectively, with accelleration controlled by a liquid rheostat. Like the DD-1's, energy from the electric motors was transmitted to the driven axles using jack shafts, flexible gearing, and side rods. The unit could produce 4800 hp, a record for those days, and a continuous tractive effort of 87,200 pounds. She weighed 240 tons, of which 198 were on the 72″ drivers.

Designed for service between Altoona and Johnstown, an area in which 12 miles of two percent grade existed, she could exert a maximum tractive effort of 130,000 pounds enabling her to haul 2300 tons up a one percent grade or 11,000 tons on level track.

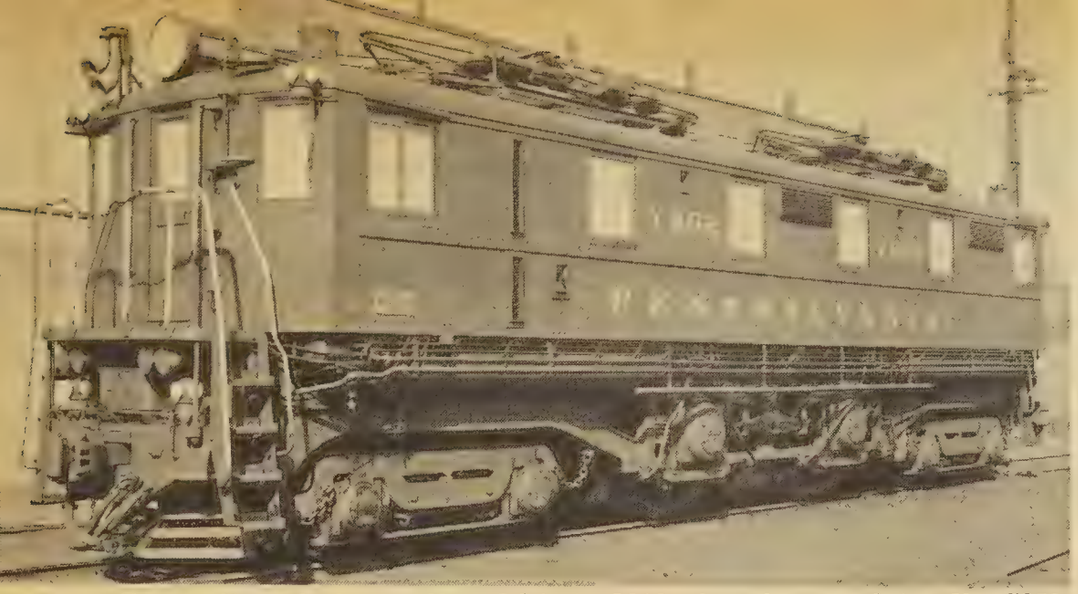
Two such units used in MU could hoist 3900 tons westbound up the grade or 6300 tons eastbound (where the ruling grade is 1.33 percent.) This was a great improvement over the steamers then doing such work.

On August 24, 1917, the FF-1 got her first trials on the Philadelphia-Paoli electrification, which has some short sections of stiff grades. The test train—consisting of a steam locomotive with 68 loads and a caboose—was handled between Overbrook and Paoli without the steamer working. Tests indicated that the FF-1 fully realized the designers' aims. For many years the type continued to be operated in pusher service to Paoli.

FURTHER testing was interupted by World War I and its aftermath. By that time the Pennsy had lost interest in the Altoona grade electrification with a constant-speed locomotive and was aiming to electrify the densely trafficked eastern end of its lines. Eventually, the FF-1 was scrapped without even having been reproduced, because of the advances in electrical engineering which permitted the building of powerful freight locomotives not limited by the disadvantage of constant speed.

Needing freight and passenger power for either the AC electrification or on the New York terminal's DC, the Pennsy undertook to design a universal locomotive. This type was to be capable of pulling either freight or passenger trains with only a change of gear ratios necessary for conversion. It had to be operable on either AC or DC with only the substitution of an AC transformer and control apparatus for the DC resis-

No. 3998 was the third of four 1580-hp. Class DD-odd electric locos built by the Juniata Shops and Westinghouse.



Altoona Shops built two Class O-la's in 1930, the other one being No. 7853.

tors and controls. The DC controls were to have many parts interchangeable with the control on the DD-1's. The AC equipment was like the AC MU cars operating on the Philadelphia suburban electrification.

In 1924-25 the Juniata Shops produced three universal locomotives with Westinghouse electrical equipment. One unit, Class L-5 numbered 3930, was equipped for AC operation and geared for freight service. Two units, class L-5a, numbered 3928-'9, were equipped for DC operation with passenger gear ratios. All units had 1-BB-1 wheel arrangement.

These locomotives, which introduced steeple-cab design to the PRR, adhered to the proven construction techniques adopted with the DD-1 design. Two sets of dual motors were used, each set driving two axles. No articulation was used, though.

The passenger locomotives were geared for 70 mph, but freight units had a maximum speed of only 35. These 408,000-pound, 3040-hp behemoths could haul a 2370-ton train up the Altoona grade at 24 mph. The AC unit had a maximum tractive effort of 100,000 pounds at 23 mph and a continuous t.e. of 50,000, while the high-speed DC units had a starting t.e. of 54,000 and a continuous t.e. of 25,000 at 46 mph.

Tests showed that these were good general utility locomotives. A total of 21 additional units were ordered in 1926 to supplement the DD-1's in handling increased traffic in the New York terminal area and were equipped for DC passenger operation. Four of them were built by Baldwin, 17 at Juniata Shops. Seven were equipped with Brown-Boveri electrical equipment, four with GE, and ten with Westinghouse. The AC unit was eventually equipped for DC operation and all the units were classed L-5. At the beginning of World War II, when the triumph of AC eliminated the need for passenger DC locomotives, they were scrapped.

MEANWHILE, a need for an electric switcher had become aparent. In 1926 the PRR built a two-unit AC switcher destined for Philadelphia service, numbered 3900-3901, and six two-unit DC switcher destined for use at the Sunnyside passenger yards, numbered 3910-3921. These units, like the contemporary L-5's, employed steam-locomotive construction and universal electric motors that could be used on either AC or DC. However, unlike the L-5's they were of box-cab construction and had no side rods.

Because the motors for these locomotives were only 285 hp each, they could be designed to mount above the axles instead of on the main frame. Therefore, the units employed a geared quill drive. The locomotives were coupled in pairs and classed BB-1.

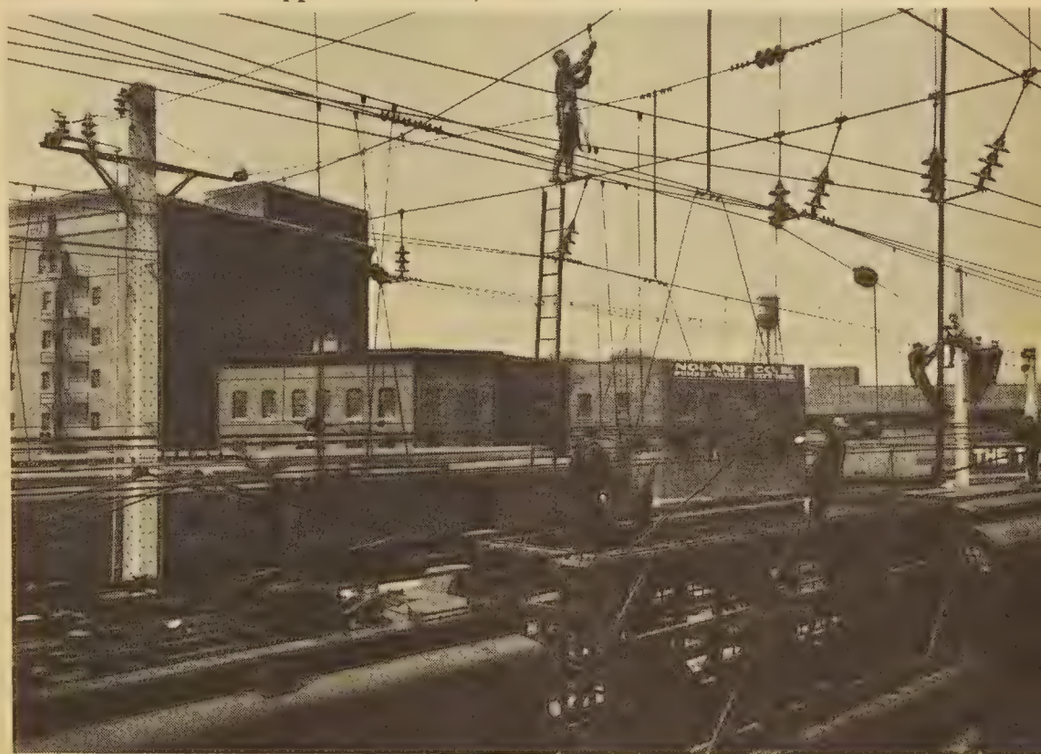
In 1929 the Pennsy's Board of Directors made the historic decision to electrify their lines east of Harrisburg and north of Washington. This would give them the longest electrification in the country. It would be based on the 11-KV, 25-cycle system installed in the Philadelphia suburban area. Initially, passenger service would be converted to electrical operation, with freight service to follow after the branch lines and yards had been converted.

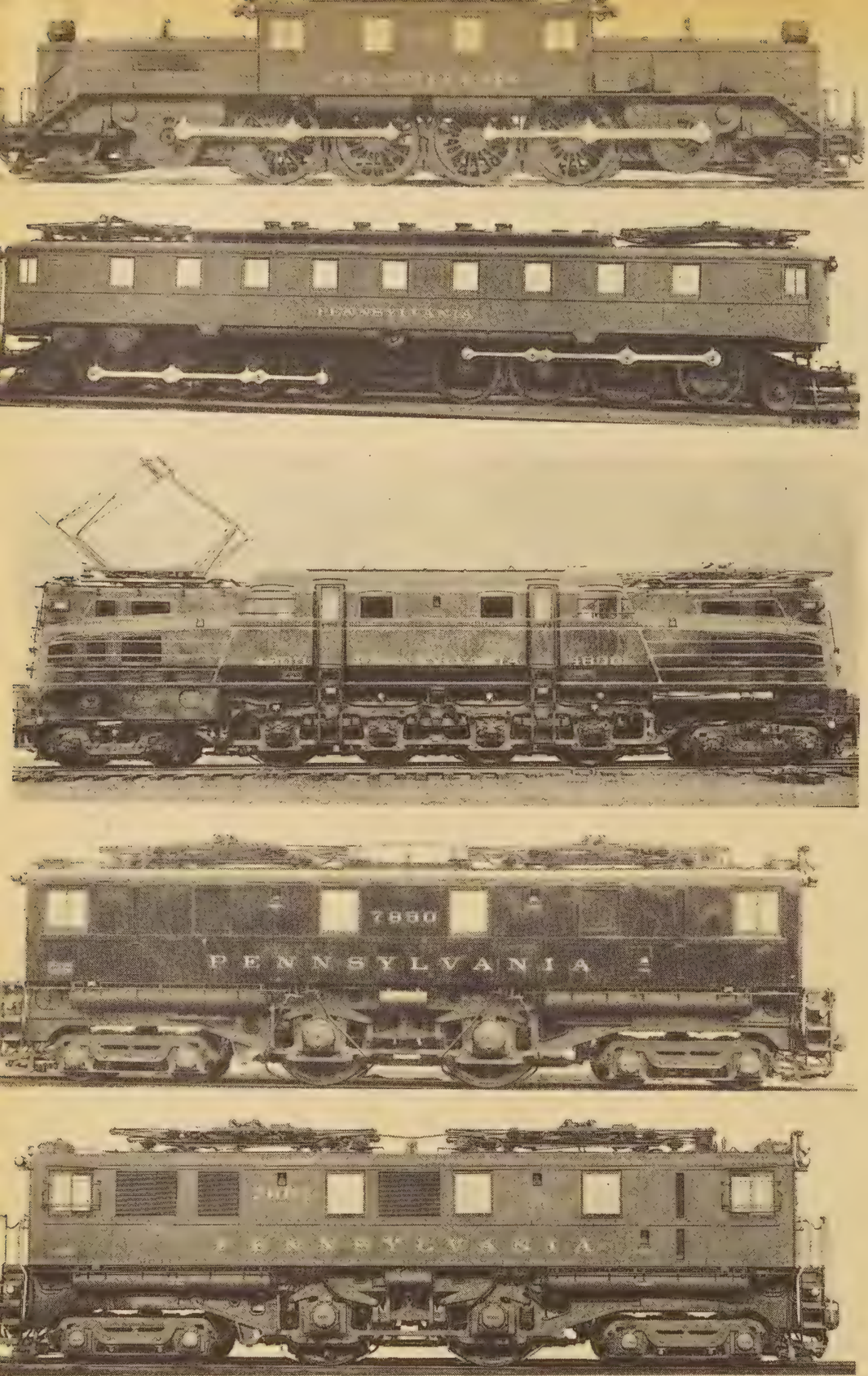
Between 1930 and '33 a number of electric locomotives were built experimentally to determine the design to be used on the newly electrified lines. The Pennsy's small-power policy prevailed in the designs adopted. Three types were to be standard. The O-1 type, with a 2-B-2 wheel arrangement, would replace Atlantic-type steamers on passenger runs. The P-5, with a 2-C-2 wheel arrangement, would replace passenger Pacifics, while the L-6, with a 1-D-1 wheel arrangement, would oust the Mikes from freight trains.

These new machines would have interchangeable parts and could be used in MU combinations to replace double-headed locomotives. All were of the box-cab variety to provide maximum visibility, and had steamer-type frames. Since the art of building electric motors had progressed to a point at which small high-capacity machines could be built, the motors used on these locomotives were supported over the axles and they utilized geared quill drive without side rods. The O-1's and P-5's had twin-armature tractive motors, whereas the L-6 employed single armatures.

These locomotives were tried out in service from Philadelphia to the end of electrification as the work progressed. From these tests it was determined that the O-1 type was not powerful enough

Wire-train gang checking on installation of catenaries in Pennsy electrification. All wires are copper or bronze, which will neither rust nor corrode.





(Top to bottom) Locomotives of Classes L-5a, FF-1, R-1, O-1, and O-1c. (Below) A group of GG-1's on the assembly line being erected in Altoona Shops.

for high-speed heavy trains. This class was relegated later to switcher and transfer service in the New York terminal area, where several still survive. But the P-5 type was adopted as the standard for passenger runs, and 90 were ordered for service between New York and Washington. The L-6 type was chosen for freight service, 50 of them being ordered from Lima.

Upon delivery, the P-5's were promptly placed in passenger service over that portion of the electrification which was completed. As the PRR gained more experience with P-5's and in anticipation of extending its electrification west to Harrisburg, several big decisions were made. First, after a grade-crossing accident in New Jersey, the box-cab design was to be abandoned and the engineman moved from his vulnerable position. Second, the P-5 without doubleheading lacked the capacity to haul the heavier trains that were being run over the electrification. Furthermore, the era of streamlining had caught on, and the box-cab just didn't have the glamor of streamliners. It was decided in 1934 to produce a higher-capacity locomotive that would move the enginemen's position back from the to front give a futuristic appearance.

AS A RESULT, two new locomotives were built. Both employed the same Raymond Lowey streamlined styling but a radically different design of running gear. Westinghouse turned out a traditionally-designed locomotive numbered 4800, dubbed the R-1, with a 2-D-2 wheel arrangement. She employed the traditional PRR steamer frame design and was, in fact, not too different from a streamlined P-5 with an extra set of drivers.

And the strange bedfellows of Baldwin-GE turned out the GG-1 with a *2-C+C-2* wheel arrangement and numbered 4999. The GG-1 utilized an articulated running gear design similar to that used on the New Haven's contemporary electrics. Compared to other electrics of the same vintage, the GG-1 design was not particularly unusual but broke with Pennsy tradition.

The assignment of number 4800 (beginning of a series) to the R-1 and 4999 (end of a series) to the GG-1 probably reflected the subconscious thinking of Pennsy motive power men.

Since the GG-1 introduced a design that was new to the Keystone Road, extensive trials were conducted along the mainline. Naturally, all new Pennsy electrics also were tested: the R-1, the GG-1 and some steam engines and the New Haven electric from whose design the GG-1 had been developed.

In these tests the modern steamer again demonstrated her good riding qualities and again the New Haven's electric proved to be outstanding design.

As for the competition between the GG-1 and the R-1, it soon became obvious that the GG-1's better distribution of weight caused her to be less slippery than the R-1, and the articulated truck design gave the GG-1 a better ride, with less track punishment. So Pennsy engineers adopted the GG-1 as their standard. Ironically, the Pennsy renumbered the GG-1 4800 and the R-1 4999.

Thereupon the P-5's were gradually relegated to freight service. The Keystone Road cancelled its order for the partly-built L-6's but retained in switching service three L-6's it already had.

The PRR made only other pre-war locomotive experiments. One involved the application of motors to the P-5's pony trucks, turning her into a P-5b with a B-D-B wheel arrangement. This obtained more tractive effort by placing more weight on the drivers. It was not repeated because of the difficulty of ventilating the traction motors at that location.

The other experiment was building DD-2 locomotive No. 5800 in 1938. utlizing fewer axles could be substituted for the GG-1's in freight service. Although the engineers were satisfied with the performance of this design, which had a 2-B+B-2 wheel arrangement and looked like a GG-1, they discovered that its costs was not sufficiently lower than that of the GG-1 to warrant its adoption. This experimental locomotive, like the P-5b, is still in service.

AT THE BEGINNING of the frantic fifties, the Keystone Road saw the need to supplement their electric motive-power fleet. In the typical Pennsy tradition of experimentation, they ordered three types reflecting progress in electric locomotive design. From General Electric came six units numbered 4939-4944, class E-2b. These were cab units of conventional B-B wheel arrangement employing AC traction motors. Placed in service June, 1951 they were the first AC electric locomotives to be equipped with dynamic brakes. The advantages of using AC traction motors come from the simplicity of the locomotive design.

From Westinghouse emerged two different designs, both based on the use of ignitrons. An ignitron is a device for converting AC to DC and thus allowing the use of high-voltage AC transmission systems such as exists on the Pennsy with low-voltage DC series wound traction motors which are inexpensive and easy to maintain.

The first experiments with a mercury arc rectifier, the granddaddy of the ignitron, took place on a Pennsy combine operated on the New Haven Railroad by Westinghouse in the 1920's. However, these tests were not successful because of difficulties in building the devices. Since then, though, the state of the engineering art has progressed to a point that such devices could be built efficiently.

The first ignitrons were installed in a Pennsy MU combine at the Wilmington shops and placed into service in July, 1949. This test installation was successful and prompted the Pennsy design of the E3b and E2c ignitron locomotives. In these units the high-voltage AC reduced to low voltage by a transformer and then is rectified to DC by the ignitrons and fed into conventional DC traction motors of the same type that are used on diesel-electric locomotives. A motor generator set which would do the same job would weigh four times more than the "igs."

The difference between the E-3b and E-2c designs is the running gear. The E-3b employs three four-wheel trucks arrangement of B-B-B. The E-2c has two six-wheel trucks with a C-C wheel arrangement. Both units were equipped with dynamic brakes.

The advantage of the igs over the straight AC locomotives are that the DC traction motors develop 47 percent more tractive effort at low speeds and that the traction motors are the standard, inexpensive DC type are used on thousands of diesels which the Pennsy already owns. The disadvantages of the igs are that the AC electrics develop more tractive effort at higher speeds.

All of these locomotives have been —and are—used in freight service and perform well. However, when it came to buying additional locomotives, the Pennsy chose the ignitrons with C-C wheel arrangement as the standard for freight. New locomotives of this E-44 class are presently being delivered.

PENNSY ELECTRIC LOCOMOTIVES

Roster compiled by Sy Reich

Railroad Class	Road Numbers	Builder	Wheel Arrang't	Tract. Effort	Weight	HP	Date	Notes
AA-1	10001	Jun.-WH	B-B	43,775	175,100	1400	1905	1
AA-1	10002	Jun.-WH	B-B	38,400	195,200	1240	1905	2
D-1(?)	10003	Bal.-WH	2-B	40,000	140,000	1600	1907	
DD odd	3996-3999	Jun.-WH	(2-B)x(B-2)	66,000	332,000	1580	1909-'10	3
DD-1	3932-3949	Jun.-WH	(2-B)x(B-2)	50,000	313,000	1580	1910-'1	4
	3952-3995							
FF-1	3931	Jun.-WH	1-C+C-1	73,000	516,000	4800	1917	
L-5	3930	Jun.-WH	1-BB-1	100,000	408,000	3040	1924	5
L-5a	3928-3939	Jun.-WH	1-BB-1	97,000	388,000	3040	1924-'5	6
L-5	3922-3927	Jun.-WH	1-BB-1	97,000	388,000	3040	1926-'8	
	7801-7807	Jun.-BB						
	7808-7811	Jun.-GE						
	7812-7815	Jun.-WH						
BB-1	3900-3901	Jun.-WH	(B)x(B)	39,500	157,045	570	1926	7
BB-1	3910-3921	Jun.-WH	(B)x(B)	39,500	157,045	570	1926	8
BB-1	5684-5697	Altoona	(B)x(B)	39,500	157,045	570	1934-'5	9
O-1	7850-7851	Altoona	2-B-2	33,500	306,500	2000	1930	
O-1a	7852-7853	Altoona	2-B-2	33,500	309,400	2500	1930	
O-1b	7854-7855	Altoona	2-B-2	33,500	301,700	2200	1930	
O-1c	7856-7857	Altoona	2-B-2	33,500	300,000	2500	1930-'1	
P-5	7898-7899	Altoona	2-C-2	55,000	392,000	3750	1931	10
L-6	5938-5939	Altoona	1-D-1	55,000	300,000	2500	1932	
L-6a	5940	Lima	1-D-1	55,250	305,000	2500	1933	
P-5a	4701-4742	Bal.-WH	2-C-2	55,000	392,000	3750	1932-'3	11
P-5b	4702	Bal.-WH	B-C-B	80,000	444,700	5300	1937	11
P-5a	4755-4774	GE	2-C-2	55,000	392,000	3750	1932	
P-5a mod	4743-4754	Bal.-WH	2-C-2	56,250	394,000	3750	1935	
P-5a mod	4775-4779	GE	2-C-2	56,250	394,000	3750	1935	
P-5a mod	4780-4790	Altoona	2-C-2	56,250	394,000	3750	1934-'5	
R-1	4800	Westing.	2-D-2	54,500	402,000	5000	1934	12
GG-1	4999	Bal.-GE	2-C+C-2	65,500	475,000	4620	1934	13
GG-1	4801-4814	GE	2-C+C-2	72,800	460,000	4620	1935	
GG-1	4815-4857	Altoona	2-C+C-2	72,800	460,000	4620	1935	
GG-1	4858-4868	Altoona	2-C+C-2	65,500	477,000	4620	1937-'8	
GG-1	4869-4888	Altoona	2-C+C-2	65,500	468,400	4620	1938-'9	
GG-1	4889-4938	Altoona	2-C+C-2	65,500	477,000	4620	1940-'3	
DD-2	5800	Altoona	2-B+B-2	71,500	450,000	5000	1938	
E-2b	4939-4944	GE	B-B	60,000	451,000	5000	1951	
E-3b	4995-4996	BLHW	B-B-B	93,875	375',500	5000	1951	
E-2c	4997-4998	BLHW	C-C	91,000	364,000	5000	1951	
E-44	4400-4465	GE	C-C	89,000	390,000	4400	1960-3	

PENNSY ELECTRIC NOTES

This alltime roster of Pennsylvania Railroad mainline electric locomotives does not include the FF-2's, of course, because they were not genuine Pennsy electrics. All locomotives listed here have (or had) alternating current, except those in Classes AA-1, DD odd, DD-1, L-5a, L-5, and Nos. 3910-3921 of BB-1, all direct current. Also see notes 5 and 8.

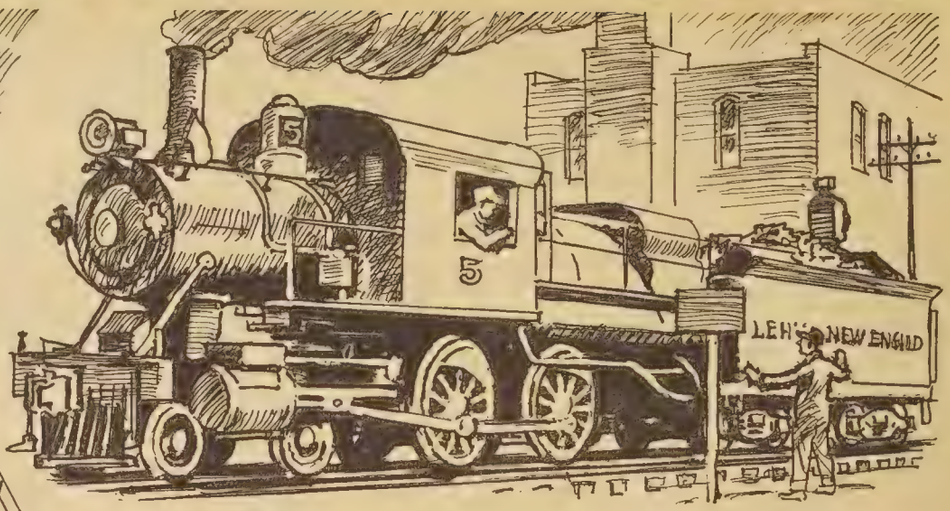
Abbreviation of builders' names: Jun.-WH, Juniata-Westinghouse; Bal-WH, Baldwin-Westinghouse; Jun.-BB, Juniata-Brown-Boveri; Jun.-GE, Juniata-General Electric; GE, General Electric: Bal.-GE, Baldwin-General Electric; BLHW, Baldwin-Lima-Hamilton-Westinghouse.

The Pennsy classification system is based on wheel arrangements with A for O-4-O, B for 0-6-0, C for 0-8-0, D for 4-4-0, E for 4-4-2, F for 2-8-0, G for 4-6-0, H for 2-8-0, I for 2-10-0, J for 2-10-2, K for 4-6-2, L for 2-8-2, M for 2-8-4, N for 2-10-4, O for 4-4-4, P for 4-6-4, Q for 4-6-4-4 or 4-4-6-4, R for 4-8-4, S for 6-8-6, T for 4-4-4-4. Thus, GG stands for 4-6-0+0-6-4 (not George Gibbs).

(1) Renumbered 3950. To Long Island RR No. 323.
(2) Renumbered 23951.
(3) Later had road Nos. 32-33.
(4) Later had road Nos. 34-42, 10-31.
(5) Converted to DC. (6) Reclassed L-5.
(7) Reclassed B-1 when units were separated.
(8) Converted to AC. Reclassed B-1 when units were separated.
(9) Reclassed B-1 when units were separated.
(10) Renumbered 4700 and 4791.
(11) 4702 converted to P-5b.
(12) Renumbered 4999. (13) Renumbered 4800.

ALONG THE IRON PIKE

by Joe Easley



THE LEHIGH & NEW ENGLAND HAD ONLY TWO 4-4-0'S: NOS. 5 AND 6, TWIN CAMELBACKS, CLASS C, BUILT BY COOKE ABOUT 1902 AND SCRAPPED ABOUT 1928.

UNIQUE SIGNAL TOWER AT VITORIA ON SPANISH NATIONAL RAILWAYS.

THE RECENT DISCONTINUANCE OF THIS CHICAGO-K.C. TRAIN LEAVES THE CHICAGO GREAT WESTERN WITH ONLY ONE PASSENGER RUN, OMAHA-MINNEAPOLIS. (*from Jim Seacrest, Lincoln, Neb.*)

LONG ISLAND RAILROAD OPERATED FOUR OF THESE BATTERY-POWERED CARS ON ITS WEST HEMPSTEAD BRANCH FROM ABOUT 1913 TILL LINE WAS ELECTRIFIED IN 1926.

THERE ARE MANY COLORED FIREMEN, BUT NEGRO LOCOMOTIVE ENGINEERS ARE VERY RARE. WHO KNOWS THE NAME OF THIS ONE? ON THE MISSISSIPPI & ALABAMA RR.

(*Drawn from photo made in 1946 by C.W. Witbeck at Leakesville, Miss.*)

INFORMATION BOOTH

ASK BARBARA: Railroad questions are answered here by our research expert—as many as space permits. Top priority is given to subjects of general interest. Address Miss Barbara Kreimer, *Railroad Magazine*, 205 E. 42nd Street, New York 17, N. Y. No replies will be sent by mail.

1 *How could those two French electric locomotives make record runs of 205.68 miles per hour with their pantographs down, as shown in* Railroad Magazine *photos (April issue)?*

It is normal practice to lower pantographs when traveling at high speed near special work in the wire such as you find at crossings, switches, crossovers, etc., according to Sy Reich, to keep them from tangling with the wire. Both pictures appear to have been taken at such locations. Of course, pantographs were up most of the time.

2 *What is a "fair-weather" car?*

An aluminum hopper loaded with coal frozen solid by sub-zero weather. Days or even weeks may be lost before it can be thawed out, emptied, and used again. But a load of frozen coal in a *steel* car is emptyable by the use of heat. You can't apply much heat to aluminum without warping it out of shape, as housewives find with saucepans.

3 *Why did many Santa Fe steam locomotives have two steam domes?*

To reduce the amount of moisture taken in at the throttle. When water surges or foams in the boiler it rises in the dome, passes through the throttle valve, and proceeds forward into the superheater and valve chamber, where it can do much damage. The Santa Fe design placed the throttle in a dome having no direct connection with the boiler. Its feed came instead, from a receiving dome of conventional pattern set behind it on a higher level, connected by two internal pipes.

4 *Has any diesel passenger locomotive ever been converted successfully to freight use?*

Yes. We'll discuss one such case. GM-built No. 10, Class EA-7, a 2000-hp locomotive which the Bangor & Aroostook had bought in 1949. When BAR passenger service began to dwindle, before it was dropped altogether, the road could not utilize both of its two costly passenger diesels except on work trains 2 or 3 months a year. So the experiment was made to convert No. 10 into a freight-hauler. EMD sent a team of engineers to the Northern Maine Jct. diesel shops to supervise the job.

The basic problem in the conversion is that the passenger engine develops its maximum power at higher speeds than the freight locomotive. The latter needs power at lower speeds to start the movement of heavy loads.

This problem was solved by changing the gear ratio from 57/20 to 62/15. The wheel diameter had to be increased from 36 to 38″ so that the 62-tooth gear wheels would have enough clearance above the rail top. The truck rods were lengthened to compensate for the change in wheel size while the coupler height was adjusted to compensate for the change in truck height.

Then the electrical control circuit was modified to give automatic voltage-current transition down to 10 miles per hour instead of 19 mph. The steam generator, no longer needed to heat passenger cars, was removed and weights were added to compensate.

Tests showed the job was a success. At speeds below 25 mph the converted 2000-hp engine is as efficient as a 1500-hp freight-hauler. At speeds above 25 it is capable of its rated 2000 hp.

"We thus converted a locomotive," says W. J. Strout, executive vice president, "from what might have been worth $18,000 to $20,000 on a trade toward a new $200,000 freight job, for under $10,000. Our one remaining passenger diesel is likewise being converted."

Another case that comes to mind was the Pennsy's conversion of six Baldwin "sharknose" 2000-hp passenger diesels to freight units about ten years ago.

5 *I want a history of Gulf, Mobile & Ohio passenger station at Mobile, Ala.*

Opened in April, 1907, this three-story station and office building belonged originally to Gulf Terminal Co., a jointly-owned subsidiary of the Mobile & Ohio (a GM&O predecessor) and the Southern Railway, both of which used it. GM&O acquired total possession in 1944 and ran its last train out of it Oct. 14, 1958. Since then it has served only for office purposes.

6 *What happened to the old* Rocket *of the Philadelphia & Reading?*

You'll find her intact in the Franklin Institute, Philadelphia. That 8.4-ton steam engine ran from 1840 to 1879.

7 *Where can I find a poem that begins, "He looks up at the sky"?*

Right here. "Train Watcher," by Daniel Smythe, was published originally in *The Washington Post* in 1946.

He looks up at the sky,
Then waits a fraction of an hour—
This human form.
He lifts his face . . . The train goes by;
He swings his arm.

The engine grows a smoky flower,
And plunges on the lands.
To the still one, the train may yield
A dream of passing people hurled
Into the cities. Against a separate world
The watcher is revealed,
Shading the eyes with hands.

8 *What's this I hear about a tunnel built between the Pennsy and Reading stations in Philadelphia?*

You hear wrong, my friend. No such tunnel exists, but an engineering report says the project is feasible. The city would shell out most of the $40 million cost, the Federal Government paying the rest. Those stations are now four blocks apart. If the plan is ever carried out, which seems unlikely, the old Reading Terminal would be razed and a new one built underground. Both railroads would share each other's facilities, some riders on one line ending their trips in the station of the other.

9 *How many locomotives does the Jersey Central have?*

181 diesels (including 30 road-freight-haulers, 95 general-utility types, and 56 switchers). The same road has 356 passenger and 5,850 freight cars (including 1,739 leased) and 49 water craft (ferries, tugs, barges, etc.), but no steam locomotive, not even on display.

10 *When was the enclosed platform observation car introduced?*

On Sept. 12, 1909, the Burlington put four glassed-in solarium cars on its *Denver Limited*. Built by Pullman Co. and called compartment lounging cars, their platforms were almost entirely screened by movable glass panels. Each solarium seated 12 passengers and was advertised as entirely protected from weather.

11 *Were the Syracuse & Baldwinsville and the Syracuse, Binghamton & New York the same road?*

No. The former, chartered June, 2, 1885, ran six miles from Baldwinsville to Amboy, N. Y., where it connected with the New York Central's West Shore line. After a foreclosure in 1892, the Lackawanna bought control of the S&B which it kept till the line was abandoned in '97. Oddly enough, no train ran over the line during that period. The SB&NY is an integral part of the Erie-Lackawanna.

12 *What is the story behind abandonment of the Pennsy's line from Toms River to Bay Head, N. J.?*

Fire destroyed the railroad bridge across Barnegat Bay from the pier to Seaside Park on Dec. 1, 1946. As a result, passenger-train service terminated at Toms River, but for a short time a bus connection to Bay Head was kept up. A few months after the fire, service ended permanently at Toms River. Today, the only relics of that route are the freight branch of the Pennsylvania-Reading Seashore Lines to Toms River and a few stations on Long Beach Island, converted to summer homes.

K-4s Pacifics handled the line's passenger service while H-9 and H-10 Consolidations hauled freight. Stations included Bay Head, Mantoloking, Lavalette, Ortley, Seaside Heights, Berkeley, Seaside Park, Barnegat Pier, Ocean Gate, Pine Beach, Beachwood, and Toms River.

13 *History, please, PRR 4473.*

She was a 2-10-0, Class I-lsa, built by Baldwin at Eddystone, Pa., in May, 1923, serial number 56496. Originally assigned to Conemaugh, Pa., in the old Central Region, she went to the Eastern Region in Feb., 1955, and the Pittsburgh Region nine months later. After running about 700,000 miles, she was dropped from roster Nov. 19, 1958, and sold for scrap.

14 *Who was "Bet-a-Million" Gates?*

Charles G. Gates of New York was a fat, diamond-studded business promoter, gambler, and stock speculator who won his nickname by a willingness to bet on anything. One rainy day, while riding the *Broadway Limited,* he bet a fellow traveler $1,000 that a certain raindrop on a windowpane would hit the window sill first. By repeating this bet, he won a total of $22,000 on raindrops. He settled a $30,000 debt with Charles Schwab, president of U.S. Steel, by a double-or-nothing toss of the coin, and won. At a racetrack in 1900 he collected over $500,000 on a 50-to-1 shot.

15 *What happened in Union Tank Car Company's legal fight to eliminate running boards from its "Hot Dog" tank cars?*

UTC won. The company's position is that running boards on such cars are not needed and, under certain conditions, are actually unsafe. The litigation was dragged out 4½ years. ICC had ruled in favor of UTC. The Railway Labor Executives Asso. had attacked that decision in the Federal courts, and only recently dropped its suit.

Edwin A. Locke, Jr., UTC president, hailed the victory as "another significant advance in tank-car design." Said he: "The resulting simplicity of design will make new cars easier and safer to load and unload, repair and inspect. Larger payloads are possible since we can increase the tank's diameter by as much as 15 inches when running boards do not have to be considered in calculations for side clearances."

Nearly half of all types of freight cars in the U.S. do not have running boards. According to the ICC, there is no longer any need for trainmen to walk the car tops in road service.

16 *Do you have the words of an old poem, "The Tallowpot's Lament?"*

Yes; written by C. Caryl McGill.

When the drag is long and the grade is steep
And the hogger is weepin' for steam
And the fire cuts like a devil's lash
And you feel like you oughta scream;
It's then you commence to weaken,
You feel like a mule that's mired;
When the coal gets back ten feet or more,
Then you're tired, you're really tired.

Eight hours of rest on a five-foot cot
In a bunkhouse smelly and dim,
Where the grub is moldy and Java's punk
And you lose your pepper and vim.
Then back to the grind they call you;
You'll go or else you'll get fired,
And you try to wear the nose off the scoop.
You're tired, and how you are tired!

Full sixteen hours the law permits
You to slave on the streak o' rust;
But ten is enough on a steady grind
To make you think you will bust;
When your skin hangs onto the coal gate
And a sandpaper thirst you've acquired,
And your overalls drag on the gangway floor,
Then you're tired as hell, you're tired!

Running Extra

Further details on partly-colored lanterns (item 14, June issue) come from John W. Hall, Johnstown, Pa. There was one type of official lantern with a globe about the size of a quart milk bottle, the upper part green, lower part clear. The road foreman or some other brass collar used it to flag trains between stations, or an operator at a flagstop station might wave it to stop a passenger or freight train. This type was standard on the Pennsy.

Another type was the presentation lantern, with a silver-plated bottom, used by Pullman conductors and elite passenger conductors also many years ago. The globe was elaborately engraved glassware, ornamented with an eagle or some other decoration.

"Who can supply details of a cornfield meet of a circus special with a passenger train on the Central of Georgia between Macon and Columbus many years ago?" asks R. M. Martin, Chicago, Ill.

"Where can I get the words of an old poem or song about oversize objects on a railroad whose name includes the word *Jerusalem* or maybe it was called Bunyan's Railroad?" writes Omer C. Hendricks (engineer, Nickel Plate Road), 547 N. West St., Lima, Ohio. "Also, I want to buy hi-fi records of steam locomotive sounds."

"What became of the old Aberdeen, Huron & Southern?" asks Chester A. Bird, 715 24th Ave., N., South St. Paul, Minn.

Wanted by George Virgines, 264 Dewey Ave., Northlake, Ill., information and pix on railroad cars built for Miller Bros. 101 Ranch Wild West Show, including the owner's private car.

"C&NW steam locomotive that blew up in 1960 was No. 1899, then in use as a boiler in the roundhouse at Milwaukee," writes C. H. Wolf, 1106 N. 6th St., Milwaukee 3, Wis., commenting on item 3 in our April department. "I had been in the roundhouse that very day photographing the 1899. After returning home I heard the news on the radio. I went right back to the roundhouse to see the wreckage."

History, roster, etc., of the Palatine, Lake Zurich & Wauconda, which connected with the C&NW, are wanted by Louis J. Haake, 4875 Edgeware Rd., San Diego 16, Calif.

"Item 24 of June *Information Booth* carried a brief history of the Williamsport & North Branch Ry.," states Charles P. Wales, 4107 Old Mt. Vernon Rd., Alexander, Va., reminding us that we published a W&NB article in our Jan. '52 issue. "I have indexed the references to individual railroads that have appeared in most issues of *Railroad Magazine* since 1930, together with a comparable list from other magazines in your field."

BOOKS of the RAILS

RIO GRANDE: MAINLINE OF THE ROCKIES, by Lucius Beebe and Charles Clegg, 380 pages, coated paper, 8½x 11", 540 b&w illustrations, 4 color paintings, map, appendix, Howell-North Books, 1050 Parker St., Berkeley 10, Calif., $10; de luxe edition $15.

Any new opus by Lucius Beebe, with or without "Chuck" Clegg's expert collaboration, is a major event. *Rio Grande* —large, sturdily bound, heavy, and of lasting value—could well become a family heirloom. It is chiefly a picture album: an opulent lot of well-chosen photographs, some fairly recent, most pix taken decades ago, and rare old line drawings, all nostalgic, backed up with accurate text matter and captions done in a rich literary style.

We are reminded of "Boss" Tweed. The fat-bellied ruler of Tammany Hall a century ago, with a beatnik-like beard, was greatly nettled by Thomas Nast's cartoons showing him in such unsavory poses as robbing the New York City treasury and garbed in convict's stripes. "I don't care what the newspapers print about me," he raved. "My constituents can't read. But damn it, they can see pictures!" Our feeling about *Rio Grande* is that even if you can't read or don't want to, the picture gallery alone is a good buy.

And it's not only for railfans. The book is well researched Western history with wide appeal outside of the dedicated group. Just as *Rio Grande* rolled off the press, the ICC rejected a D&RGW appeal to abandon its narrow-gage Silverton line, including its well-paying steam passenger run. The book supplies background material for this news story.

ADVENTURE UNDERGROUND: The Story of the World's Great Tunnels, by Joseph Gies, 260 pages, 5½x8", illustrated with photos, maps, diagrams; bibliography but no index, Doubleday & Co., Inc., Garden City, N.Y., $4.95.

This book has a special appeal for students of railroad history because the tunnels described and pictured here almost without exception serve railroads. Gies also goes into subways. The first was built in London, the second in Glasgow. He writes, "Today some 30-odd cities in all parts of the world have passenger subways." We wish he had listed them and supplied a lot more details. (Incidentally, his dramatic account of the building of Simplon Tunnel ties in with our current article, "Adventure Rides the *Orient Express*.")

THE MOFFAT ROAD, by Edward T. Bollinger and Frederick Bauer, 359 pages, coated paper, 8½x11", 430 b&w illustrations, colored frontispiece, detailed maps, mechanical drawings of engines and cars, loco roster, bibliography, indexed, Alan Swallow, 2679 S. York St., Denver 10, Colo., $15, de luxe edition $20.

Here, for the first time, the saga of building the Denver, Northwestern & Pacific (Denver & Salt Lake) through the Rockies, including the Moffat Tunnel—an epic in itself—and the Dotsero cutoff, despite extreme obstacles, is told in a really big way.

The Moffat Road took five years to write. It is a fine job of bookmaking, heavy to lift, exciting to read. The illustrations are priceless. One shows a train with an open-platform observation car waiting beside the station dining-room at Arrow, a village with seven saloons, while the passengers eat dinner. We are intrigued by a small group of women standing on the track, with nobody else near. Wonder what they were doing?

THE LONG ISLAND: A Comprehensive History: Part 1, South Side R.R. of L.I., by Vincent F. Seyfried, 81 pages, 8¾x 5¾" stiff binding, illustrated, loco roster included, distributed by Ira J. Fried-

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Collection of Wm. S. Cooke, retired Reading district passenger agent, first president of Electric Railroaders' Asso.

man, Inc., 215 Main St., Port Washington, L.I., N.Y., $4 plus 9¢ postage.

A carefully researched account of one of LIRR's chief competitors, the South Side line, which operated the present Montauk Division as an independent railroad, 1867-1876, including much information never before seen in a book. The photographic illustrations, supplied by Wm. Rugen, are of unusual interest but poorly reproduced. Seyfried is now working on future books for his LIRR series. Readers who can supply data may contact him at 163 Pine St., Garden City, L.I., N.Y.

RAILS TO THE HIGH COUNTRY, by Richard F. Lind, foreward by Howard Fogg, 11x14", fine paper, photo album, indexed by loco types, published by the author, 871 Crescent Dr., Boulder, Colo., $4.95.

Because of its giant size and the quality of its Colorado steam photos by 16 camera-artists, this album is without a peer for its railfan format. The center doublespread, a Rio Grande doubleheader, 22x28", is superb, but our votes for the three most distinctive shots go to full-page "weather" pix: Colorado & Southern freight in a fog, by John W. Lozier; C&S freight in a snowstorm, by Richard F. Lind, and two slim-gage engines, heaped with snow, working to clear Cumbres Pass, by E.S. Peyton.

GREAT DAYS OF THE CIRCUS, by Freeman Hubbard in consultation with Leonard V. Farley, 153 pages, 7x10", hard smooth paper, 55 illustrations in color, 63 b&w, indexed, American Heritage Junior Library, 551 5th Ave., New York 17, N.Y. $3.95; with special binding for libraries and schools, $3.79.

Hubbard's history of the circus, with emphasis on rail transportation, is detailed and lively. It was checked for accuracy by Leonard V. Farley of the San Antonio Public Library's Hertzberg Circus Collection, the world's largest collection of its kind.

"The story," Farley says in a foreword, "has been assembled from dog-eared scrapbooks and dusty albums, from America's leading circus collections and the memoirs of great showmen. Many of the finely lithographed prints and posters shown here had not been reproduced in color since they were plastered on the barns, store fronts, and fences of backwoods America many years ago."

Although *Great Days of the Circus* was planned mainly for teen-agers, it was written and illustrated in such a way as to interest all age groups. Its 118 pictures came from 38 libraries, museums, archives, and private collections and are presented in the format for which American Heritage is famous.

PENNSY, A to T, by Paul and Daphne Carleson, 96 pages, 7x10", coated paper,

141 photos, P. & D. Carleson, 305 Henry St., Fairview, N. J., $5.

Mainly steam photos, a choice Pennsy collection. Included is much factual data: chapters on freight and passenger power, switchers, Atlantics, Moguls, Consolidations, Mikados, etc. A book to read, enjoy, and keep for reference.

MALLET ARTICULATED LOCOMOTIVES, reprint of Baldwin Record No. 72, coated paper, 44 pages, 6x9", illustrated, Harry P. Albrecht, 40 Wilton Ave., Clifton Heights, Pa., $2.

Text, photos, diagrams, specifications.

RAILROAD READER'S INDEX: 1958: American Steam and Diesel-Operated Roads, 24 mimeographed pages, 8½x 11", Parker Publishing Co., 3831 Merrian Dr., Victoria, B.C., Canada, 50¢.

Comprehensive 1958 index of fact material in *Railroad Magazine, Trains,* etc., Especially useful for readers of our magazine, which does not issue annual indexes.

THE GEORGIAN LOCOMOTIVE, by H. Stafford Bryant, Jr., 89 pages, 7¼x 10½", good paper, illustrated with 51 photos, bibliography, *Barre Gazette,* Barre, Mass., $7.50.

A fine-looking book, semi-technical, well written, devoted to a neglected phase of railroading: the esthetics of U.S. steam locomotive design in the period between the world wars, which the author calls the Georgian Era. The title is confusing to American readers.

THE *GENERAL* RIDES AGAIN!, by B. M. Atkinson, 42 pages, 6x8", illustrated, Coach & Four Publishing Co., 9803 Taylorsville Rd., Jeffersontown, Ky., $1.

Present-day story of a famous old engine, for future railfans who have just learned how to read.

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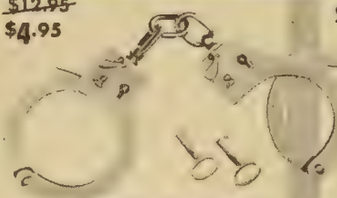

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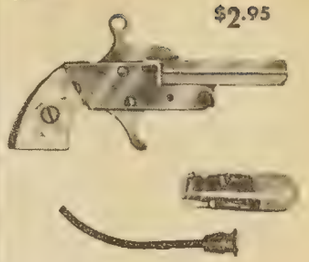

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FORTHCOMING RAILBOOKS

Lucius Beebe has just written a book on the *20th Century Limited* for publication by Howell-North. It is timely because the flagship of New York Central's streamliner fleet is celebrating its 60th birthday. The famous red carpet that is unrolled on the concrete platform of Grand Central Terminal every day at 5 p.m. for the *Century's* westbound passengers is 6′ wide, 260′ long, and weighs nearly half a ton.

Donald Duke of San Marino, Calif., editor of *Pacific Railway Journal,* is doing a book entitled *Pacific Coast Shay*.

Two of our feature articles, "Adventure Rides the *Orient Express*" (in this issue) and "The World's Fastest Train" (June) have been adapted for two of the chapters in a book on *Great Trains of All Time* that Freeman Hubbard is writing for publication late this fall by Grosset & Dunlap, Inc. The book will be illustrated in color and b&w by Herb Mott, longtime cover artist and illustrator for *Railroad Magazine*.

NEW RECORDINGS

Reviewed by Howard Shottenfeld

"Steamboat Tunes," $1 from Greene Line Steamers, 327 Public Landing, Cincinnati 2, Ohio, is a real novelty. It's a 7-inch, 45-rpm recording of the steam calliope of the old excursion steamboat "Delta Queen" as played by Billy Menke and well-known trolleyist E. J. Quinby (No. 8 in the "Interesting Railfans" series). In case you don't know, the calliope was the noisemaker that brought up the rear of circus parades and was often used on river boats as well. Probably not more than 4 or 5 are left in the entire country. The Menke-Quinby repertoire includes Stephen Foster tunes and other sentimental favorites of long ago. "Steamboat Tunes" recalls the days of showboats and paddle-wheel steamers on the Mississippi. If you're an oldtimer, which your reviewer isn't, you'll love it.

Another interesting new release is the 12-inch LP "Voice of the Iron Horse," $4.95 from Associated Four Productions, P.O. Box 7, Parsippany, N.J., with a side each devoted to Buffalo Creek & Gauley's famous 2-8-0's and Reading steam fantrips. Good recording and quiet surface enhance such features as exploding BC&G torpedoes, whistle duets by doubleheaded Reading 4-8-4's, and fine grade-climbing, driver-slipping action on both roads.

Loose Journals

Train-Ferry Service—Fiction Story by T. X. Jordan

STEPPING out of the yard office at Westport, northern terminus of the Midwestern Railway, "Spike" Hennessey watched the third-trick boat engine puffing a little cloud of smoke as she shoved a string of boxcars into the brilliantly lighted car-ferry. Spike was a boomer, tall and solidly built, with a shock of red hair and the bluest eyes you ever saw. His usual devil-may-care mien was gone; in fact, he envied the switchmen at work.

It was chilly, with sleet blowing in from across the lake, and Spike needed a job. He carried in his pocket a letter from his widowed sister. Bad news. His only niece Dora, had hurt her leg, paralysis had set in, and the doctor advised a series of costly treatments.

The big man cursed under his breath. With his usual cocksureness, Spike had quit his job as assistant night yardmaster on the Chesapeake & Ohio and his stake had dwindled before he got the letter. He loved Dora as he loved nobody else in the world, but he wasn't much good now, nearly broke in her time of need. And so he had come to the Midwestern in search of a job.

Ordinarily, boomers shunned the Midwestern because of its cold climate in winter and the company's reluctance to hire drifters. Spike turned up his coat collar and thrust his hamlike fist deep into his pockets. His eyes followed a field man of the switching crew who made a cut on the long string of clattering cars and got ready to shove on the outside track of the ferry.

His lips curled. Ten minutes earlier the yardmaster had informed Spike that the Midwestern did not want boomers. Hennessey planned to ask the mate on the ferry to carry him across Lake Michigan but his thoughts were suddenly diverted. A big steel automobile car had split the switch and was heading for the edge of the pier. The conductor and field man frantically swung their lamps in a washout, but by the time the car stopped it was off the track, with one truck resting precariously on the rim of the pier. Spike walked over to the scene and listened sympathetically.

"And just when I got things set so I could get a little shut-eye," he raved, "this damned—"

"What happened here?" A harsh voice cut in, the voice of a sharp-featured man whom Spike felt instinctively was a trainmaster.

"They're all over the ground," spluttered the yardmaster.

"I can see that. What caused it?"

"I don't know. Maybe a brake-beam down."

"That's your guess, Wright. Who handled that switch list the last time?"

The field man stepped up. "I did."

"You are out of service, Henderson. Come to the office and pick up your pay. You were careless in not making sure that switch was properly latched." The official glared at the yardmaster. "Call an extra man!"

He strode away and the unlucky Henderson followed at a distance. At that moment, by sheer coincidence, a young fellow wandered onto the scene and Spike gathered from the conversation that he was a callboy.

Yardmaster Wright asked, "We got any men on the extra board?"

"None available now," said the kid.

"What does Morgan expect me to do, *make* a switchman?"

"You're the general!"

Wright snorted, looked around vaguely, and addressed Spike with sudden decision. "Ain't you the guy who asked me for a job of switchin' an hour ago?"

The boomer's leathery features lit up with sudden hope. "Yes, sir, I am."

"Well, feller, you arrived at the right time. But I warn you, this pike doesn't hire boomers. Now I'll ask some questions to protect myself. You get the job if the answers are right. Where have you been workin'?"

Spike's blue eyes took in the bay, where sleet and wind were churning the gray water into white-topped waves.

"Picking apples," he said. "I just heard a noise and came over to see the fun."

Wright grinned. "What's your name?"

"Hennessey. Spike Hennessey."

"How old are you?"

"What's the age limit here?"

"Twenty-eight, but your expression says you are goin' on twenty-seven. You're hired, and here's a tip. That swellhead you just saw is the new trainmaster, Morgan. Watch out for him! He's poison to boomers and he'd fire you in a minute."

"So I noticed." The redhead smiled wanly. "I need work and I need it bad. Does the TM know his stuff? I mean, is he a rail?"

The ringmaster spat in disgust. "Hell, no! He married a brass collar's daughter and they made this job for him. The bastard even managed to fire some old heads to save the company pension money. This yard is full of students right now and Morgan wonders why they ain't handlin' the boats in record time. Okay, Spike, go to work!"

FIVE minutes later the hefty redhead joined Wright and the conductor at the derailed car. With a dexterity bred of long experience he aided in placing the rerailer under the wheels, and soon the heavy car was back on the iron.

Wright faced the conductor. "Allen, this is your new helper, Spike Hennessey. And remember, he is a student, if anyone should ask you."

Allen nodded. He lined the switch

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and again shoved cars onto the boat. Spike was passing signals to the engineer when the trainmaster drew near and asked: "How long have you been switching here? I can't recall having seen you before."

Spike hesitated. "I just hired in," he said. "This man," indicating the yardmaster, "needed help and I was down here looking for a job on the boats and I got a chance to switch cars instead."

"Yardmaster hired you, eh?" Morgan's lips were thin and tight. "Where have you been working?"

"For a farmer out south of town," said Spike, trying to look dumb. He knew he'd be discharged at the end of thirty days for faked references, but he wanted to keep the job for at least that long and send his sister the money for Dora. Besides, by that time the hard-coal rush should be on.

"Ever done any railroading before?" Morgan asked slyly as Spike gave an "easy ahead" signal with practiced ease. "Where did you learn the signals and how to handle switches?"

Spike Hennessey kept a poker face. "I always aimed to be a railroad man an' I took a course from a correspondence school, mister. I been studyin' them signals for two years."

Morgan eyed him narrowly. "I'll see you tomorrow. If you are a boomer your first day here will be your last."

The trainmaster walked away through the swirling sleet. Spike gazed after him a moment and then resumed work. Pretty soon the boat was ready to cast off. The locks were lifted, the stern gates lowered, and the big slate-colored vessel began a stormy eighty-mile journey across the inland sea.

A few minutes later another Midwestern ferry steamed into the slip like a gray ghost. Spike climbed to the top of the boxcar nearest the 0-6-0 switching engine, and as soon as the boat was lashed to her moorings and the tracks lined up, the unloading commenced. Cars began rumbling out from the interior. A vicious gust of wind almost blew Spike off the icy car top. He anchored one foot under the running board and squinted into the gloom.

As the long string of cars backed protestingly off the boat, the wind rose to a gale, blotting the ferry from view. All that Spike saw was a dull blaze of lights at the stern. He could not distinguish lamp signals. Too old at the game to take a chance at derailment by failing to see a signal, he swung his lantern in a stop sign.

The flurry cleared as quickly as it had sprung up and again the work of unloading went on. The huge ferry held 38 cars; the yard goat had already pulled out one center track of ten cars and the two outside tracks of nine cars each. She now had hold of 28 cars.

ONCE more Spike found it hard to see the field man's lamp through the driving sleet. At last he got it and watched like a hawk. Snow stung his eyes; cold numbed his limbs. He blinked at the pain of constantly watching the faint pin-prick of light.

After a moment's hesitation he swung a stop signal. He heard the air hiss as the engineer set his independent brake valve. The cut of cars stopped; slack ran in with a rattle of drawbars and draft gear.

Spike knew instantly what had happened and his heart sank. Due to the blaze of lights, he had missed a signal! The cars had coupled to the string aboard the boat at speed too high. And the boomer wanted so much to hold his job, mostly for Dora's sake. At length a signal came. He passed it on to the hogger, and the last of the sleet-covered cars rumbled out from the ferry deck.

Yardmaster Wright came over and said crisply: "That sonuvabitch Morgan is on the warpath. You knocked a bumper off when you missed a signal. Oh, I'm not blamin' you. But Morgan is gonna ride you for it. He won't take the weather as an excuse. You'd better figure out an alibi damn quick."

The boomer chuckled. "Thanks for the tip. I've got an idea. It wouldn't work with a railroad man but it might get by with a scissor-bill like Morgan."

By that time the trainmaster had come up. "Hennessey," he accused, "you knocked the bumper out of the port center track of that boat. How did it happen?"

"I'm sorry, Mr. Morgan," the boomer said glibly. "This is my first railroadin' and I ain't used to ridin' boxcars. The car had loose journals and the swayin' made me dizzy."

As Morgan studied him, Spike held his breath. Would the TM believe his tall tale?

"Why didn't you report that car at once?" the official asked. "If what you say is true, it isn't safe."

He addressed Pinkey, who appeared to be choking on some invisible object.

"Wright, you can go home if you like. Fifty-eight will be in at 1:24 a.m. Mr. Martin and a group of officials from the Simplex Automobile Company are on board. The ferry manifest is running in two sections tonight and the first section is a trial shipment of Simplex parts. If the Midwestern makes good on this test run, Simplex plans to route a hundred loads a day over this road. You go home and get your rest. I'll look after things here."

The ringmaster's brow clouded. "I see," he said, restraining himself with effort.

Spike gave a puzzled glance. Then it dawned on him. Morgan had got the day yardmaster out here to do the dirty work. Now that it was done, he was sending Wright home and taking all the credit himself.

SPIKE lined the switch to shove the last of the loads aboard the ferry. He turned to Allen curiously.

"Who is this guy Martin?"

"He is the general super and he's good. You couldn't pull that loose journal gag on him. He's sour on boomers, too."

The engine backed away from the apron, or bridge, and the boat headed into the blackness of night. Three hoarse bellows sounded from the harbor entrance.

"That must be the *Superior* coming in the bay," said the conductor. "Morgan wants that private car brought down and made ready to cross the lake with the Simplex shipment. We'll have to move fast."

It didn't take a half-hour to dock the *Superior*. The long bridge connecting the dock tracks with those inside the boat was lowered into place by deck-hands. Then the fireworks began. Allen coupled to the left center string of cars, and almost before the deck-hands had time to leap aside, the cars were rolling from the interior of the boat.

They pulled the first three tracks of the boat swiftly and efficiently, but after Allen had coupled to the last track, the expected signal did not come immediately. Spike was standing on the curve passing signals when Morgan suddenly appeared beside him.

"Does that conductor know he had only ten minutes until the ferry-train arrives in the yard? Why doesn't he hurry?"

"He is hurrying," said Spike.

Allen backed the cars a few feet from the string on the boat and stepped between the cars to adjust the knuckles, which had failed to couple. Morgan fairly danced with impatience as he heard the ferry manifest whistle at the top end of the yard. Before Spike could block him, he raised his lamp in a vicious "come ahead" signal.

"I'll make him hurry!"

Spike felt a thrill of horror. Allen

was standing between the cars and if the heavy drawbars met before he could get out he'd be crushed to death!

The redhead grabbed Morgan's arm and brought it down with a violent twist, at the same time swinging a signal to the engineer with his own lamp. But the hogger had seen the first signal. The heavy switcher barked; the cars coupled with a resounding crash. Out of the corner of his eye Spike saw Allen leap desperately from between the cars and light on the timbers at the edge of the pier.

Then Spike forgot he was a student, forgot he wanted to hold his job at all costs. He grabbed Morgan, snarling, "You damned leatherhead, what are you trying to do?"

The enraged trainmaster broke away from his grasp. "Let go of me!" he cried. "You are all done here. You are a boomer. You think you made a monkey out of me by getting me to ask the car inspectors about those loose journals, didn't you?"

AT THAT moment a voice of authority barked just behind them. "What's going on here?" Spike and Morgan turned to face a sandy-featured man whose slight figure radiated vigor. The trainmaster's arm dropped.

"This switchman struck me, Mr. Martin," he said in an aggrieved tone. "He was insubordinate and—"

The general superintendent asked Spike, "What have you to say for yourself?"

The boomer replied: "Mr. Morgan gave a come-ahead sign while a man was between the cars adjusting the couplers!"

"Did you?" barked the official.

"Why, yes, I did, Mr. Martin," said the TM, "but I had no idea that anyone was between the cars."

"Go over to the office and wait for me!" The general superintendent turned to Spike grimly. "Do you know the penalty for striking a fellow employee while on duty?"

Spike's brain clicked. In view of Martin's known antipathy for boomers, he'd better not admit knowing the rules.

"No, sir, I don't," he said meekly. "I'm just a student."

Martin glared at him. "Student? You a student?" He hesitated. "I'll look up your record when I get back from across the lake. And if I ever hear of you striking another employee while on duty I'll blacklist you over the whole country! That clear?"

"Yes, sir, it is."

The big brass collar stalked away. The last track aboard the ferry was emptied while he was stating his case, so Spike rode to the crossover and shoved the forty cars in the boat yard.

A mighty steam engine, Mountain type No. 6307, pulled through the boatyard with the loads of Simplex Motors. The train was ready to handle in record time. Spike backed the head end over the switch and looked around for conductor Allen. He saw only the young helper talking to Morgan.

"Where is the conductor?" he asked.

"Allen sprained his ankle when he jumped from between the cars," replied the helper. "Morgan told me to go ahead and load the boat and said he'd boss the job himself. I don't like this. It takes an old head to load ferries."

Spike slapped him on the shoulder.

"You'll make out all right, kid. Just go ahead and load it like Allen does. I'll see that you don't make any mistakes!"

The helper showed Spike the switch list, saying: "There are eight loads of cushions first out, then ten loads of motors, twelve of light parts, and eight of motors. I'll shove the cushions in the scale track with the private car, and get the heavy loads of motors on the center tracks of the ferry. The cushions and the parts can go on the outside tracks, and the boat will trim evenly. Right?"

Spike nodded. He threw the switch to the scale track. They coupled to the private car and started to shove ahead, but Morgan swung a stop sign.

"Back up and shove on the boat with that private car," the trainmaster shouted, undoubtedly aware that the super was watching him. "We haven't got all night to fool around."

"You can't do that, Mr. Morgan!" The helper was plainly nervous. "You'll turn the boat over if you put those light loads in the center!"

"Give me that list!" said Morgan. "I'll load this boat myself."

THE HELPER surrendered the switch list and backed away, glad to shed the responsibility. Morgan took the private car and shoved it on the left center track of the boat with the light loads of cushions, then started the heavy loads of motors toward the outside track on the opposite side of the ferry. The boat listed badly as the first car rumbled over the bridge. Another loaded car creaked aboard, and the list became

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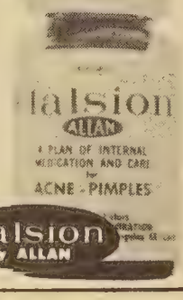

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more pronounced, more threatening.

Spike tapped Morgan on the shoulder. "You'd better get those loaded cars in the center before you turn this boat over!"

"I'll take care of this boat," said Morgan. "No damned boomer is telling me what to do."

The big redhead shrugged and stepped back. He had seen pompous officials come to grief before.

The third heavy load creaked down and the boat leaned more than ever. The pronounced list of the ferry was putting a severe strain on the lines from ship to shore. The mate appeared and gazed anxiously at the cables. Then the fourth car started down the bridge. The boat tipped far over, and with a sharp crack one of the big hawsers broke.

The mate yelled: "Man the port lines! Smartly now, before she rolls over!"

The fifth car rolled down the bridge. The stern sank to the water line. Another hawser parted with a loud report. The crew began jumping to the dock.

"Abandon ship!" roared the mate as he raced to awaken the occupants of the private car and the engine-room force. "All hands abandon ship!"

By now the cables were taut and strained. If another one broke the boat would never reach the open water of Lake Michigan but would capsize at the dock!

Superintendent Martin and the ship's captain ran toward Morgan. The latter raised his lamp to give a stop signal. Spike knocked it from his hand.

Nothing could save the ferry now if the cars were stopped on the stern. And to shove more on also meant that the boat would be lost. Spike swung his lamp grimly in a kick signal.

Morgan grabbed his arm. "Don't do that!" he cried wildly. "You'll sink the boat!"

"Sink, hell!" shouted Spike, repeating the signal. The helper was standing by, white-faced and trembling. "Shove the other wing of the boat, quick!" Spike ordered, and the helper nodded.

The engineer was a veteran in boat-yard service. He knew something was wrong. When he got that kick signal he acted without delay. The moment the engine barked, Spike swung a stop signal cut off the five cars on the boat, and gave a violent back-up sign.

Then he ran and caught the last car of the five he had kicked on the boat. There was one chance to save the vessel. If the heavy cars would roll toward the bow, it would relieve the weight on the stern. But someone would have to set a hand-brake on the cars to hold them in. And if a hawser should break before that, it would be just too bad.

The cables groaned as the loads moved along the track. For one agonizing moment it seemed that they must turn on their side, the boat tilted so badly. But they ran safely to the bow, and the lines held.

SPIKE set a brake and hustled back to the stern of the ferry. He mopped his brow in relief. With an almost human sighing sound, the stern arose above the water-level. A moment later the other loads were balancing the boat. Spike leaped to the dock and shoved the loads on. His thoughts were bitter. In saving the ferry he had been forced to disclose that he was an experienced man. Morgan would make an example of him to cover his own mistakes— if the harsh-voiced Martin didn't beat him to it. Well, his chances of paying Dora's hospital bills were shot to hell—unless something else turned up. While he was glumly watching the cars roll aboard the ferry, Morgan grabbed him with a snarl.

"You damned smart boomer, you made a fool out of me tonight!"

Spike saw a fist coming toward him and ducked. Then he wound up. All the pent-up bitterness was concentrated in the terrific blow he landed on his opponent's jaw. The trainmaster skidded over the edge of the dock and Spike yelled: "Pick the loose journals out of those waves, you flatwheeled clown!"

The big redhead finished loading the boat while the deck-hands fished the bedraggled trainmaster from the icy water. Mr. Martin and one of the Simplex officials watched thoughtfully. There was a look of satisfaction on the general super's face as he noted the efficient manner in which Spike loaded the ferry.

When the last cars were rolling aboard, the big brass collar approached him and said: "Thanks for your quick action and sound judgment in averting a bad accident, Hennessey. Do you still insist you are a student?"

"Hell, no!" retorted Spike. "I've worked on plenty of jobs, including three years of loading boats for the Chessie. My last job was assistant yardmaster."

"I thought so," said Mr. Martin. "Booming around doesn't get you anything. There's a good spot for you on the Midwestern if you want it."

The hoarse bellow of the shore call drowned out Spike's reply, but the expression on his face was answer enough. ●

Scheduled for abandonment: North Shore Line, America's last true interurban. A gleaming *Silverliner*, Chicago-Milwaukee local, speeds north near Racine, Wisconsin.
Richard J. Solomon, managing editor of "Headlights," P.O. Box 80, Church St. Sta., New York 8, N.Y.

Steve Maguire's TRANSIT TOPICS

WE need a 20th birthday cake. This department first appeared as *Electric Lines* in Sept. '42 *Railroad Magazine*. Before that, "juice" news and comments formed part of the more general department now called *Mail Car*. Thanks to a suggestion by E. J. Quinby, the juice-fan section was given its present status.

Steve Maguire

At that time 18,000 miles of trolley and interurban tracks were in use in the U.S. and Canada. Since then the total mileage has dwindled to about 2,000, operated by only 15 trolley and interurban systems. Partly replacing the lost surface lines, several rapid-transit routes were built in large cities. Happily, foreign countries have not suffered from the same reckless and rapid conversion to buses. Hundreds of thousands of miles of traction and transit lines remain in use overseas.

END of North America's interurban era came closer when the Interstate Commerce Commission authorized the Chicago North Shore & Milwaukee to quit its entire 106-mile line last June 22nd, conditioned only on a sale if by that date a buyer could be found to continue operation.

There is a difference of opinion as to which railway is, or was, the last interurban. The North Shore was always an interurban. But some fans regard the Chicago South Shore & South Bend as such because of its street-running and single-track operation, although years ago the South Shore upgraded itself to the status of heavy electric railway and thus, nominally at least, out of the interurban class. Commuter groups tried hard to keep the North Shore running. Richard J. Solomon, Alex Darragh, and Jim Scribbins sent us this news.

HOWARD GREENWALD'S article on "Cincinnati's Unused Subway" (August issue) drew this response from W. Parks Grant, 303 University Ave., Oxford, Miss.:

"The author stressed the original hopes for running interurbans over the subway tracks. The high-speed red cars bought by the Cincinnati & Lake Erie in 1930 were equipped originally with a high platform that covered the stairwell and folded up against the side, plus inward-swinging doors, similar to typical train equipment.

"In Dec. '32 a C&LE motorman told me that this equipment was for use in Cincinnati's subway. Shortly afterward, leaf-type folding doors replaced it. Later, when Lehigh Valley Transit bought some of those cars they re-installed high-platform fixtures for use on that part of the run the run which was over the Phila. & Western (now Red Arrow.)"

AS WE GO to press, word comes from Alex. Darragh of Wilmette, Ill., that the Chicago Transit Authority is being granted its request for a $7¼ million Federal loan to buy 90 new

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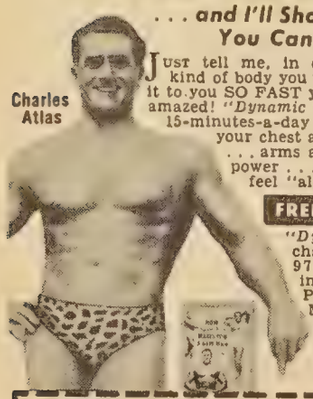

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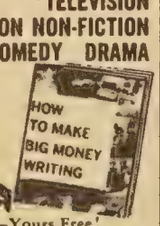

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Key System's famous articulateds (above) now run on the General Urquiza Ry. in Argentina. One of that type, 174, is shown at San Francisco terminal in 1957.

Arnold Irvine Reid, Defensa 665, 5 F, Buenos Aires, Argentina

subway-el cars. CTA will buy these cars with money set aside in its depreciation account for the replacement of equipment.

Chicago's Mayor Richard J. Daley says: "In our desire to save time we have built wonderful expressway systems —only to find that they have failed to reach the real objective: *the movement of people, not vehicles!* We have permitted our mass transportation systems to deteriorate and now we must restore and improve them to prevent the strangulation of our cities."

NOT OFTEN these days does a new trolley line open. We announce joyfully that the Columbia Park & Southwestern Ry. is beginning service with cars 303 and 304 over one mile of track at Columbia Heights, Ohio. These cars are two of the four St. Louis-built interurbans that the owner of the new line, Gerald Brookins, got from Shaker Heights Rapid Transit, which in turn had bought them from the Aurora, Elgin & Fox River in Illinois.

Mr. Brookins also has an open trolley from Veracruz, Mexico. The next cars he will place in service are SHRT Nos. 18 and 25, originally from Cleveland, and in 1963 he will add four more interurbans. He has acquired former Chicago, Aurora & Elgin cars 36, 303, 319, and 409, now being renovated in Chicago & North Western shops.

Efforts of a municipal building inspector and the Citizens' League to halt completion of the line on a trumped-up charge of zoning violation failed when Mr. Brookins pointed out that he had begun construction and bought trolleys to the location before the zoning rules went into effect. However, local objections may interfere with enlarging his trailer park.

The line runs from a supermarket through the trailer park and beyond. Besides providing a public service, this park accommodates a group of museum trolleys, housed in a car barn 300 feet long. Cars run daily, but especially for week-end visitors. According to James M. Blower, 308 S. Rose Blvd., Akron 13, Ohio, who works for the line, railfans are welcome to take part in the operating projects.

A NEW air-conditioned terminal is being built at 69th Street, Upper Darby, Pa., by the Philadelphia Suburban Transportation Co. for its Norristown cars, reports Andy Maginnis, 38 Harvey St., Philadelphia. Costing over

$150,000, it will replace the present terminal, built in 1907. It will be two stories high, the lower portion connecting with the PTC elevated line and the upper with the main waiting room. Norristown cars will have a three-track, four-platform, stub-end terminus instead of the present old wooden structure. The surface car terminal is unchanged.

For the first time in five years, the PSTC annual report does not mention elimination of rail lines and replacement by buses.

NEW ORLEANS' 10-cent fare and streetcar system have been jeopardized by the extension, at City Council's orders, of a New Orleans Public Service bus line into Algiers, La., across the river over a new bridge. As reported to us by Wilbur Golson of Baton Rouge, La., and Don Shelburne of Huntington, Calif., the extension caused the competing bus line in Algiers to protest to the Securities Exchange Commission. SEC in past years has brought about rail abandonments by ordering companies to divest themselves of their interests in transportation lines. As in New Orleans, these transit lines could not support themselves without the added revenue from power utilities, so they quit.

SEC is inquiring into the NOPS gas, electric, and transit operation controlled by Middle South Utilities, Inc., and even at this late date the company may have to split its interests. This could mean the end of the 10-cent fare and probably also the streetcar operation and some of the bus service. It doesn't seem fair that outmoded SEC regulations can end the nation's lowest city transit fare and much of the transportation system.

The two freight trolleys at the Bogalusa, La., paper plant have resumed operation after a seven months' srtike of employees at the Crown Zellerbach plant. Those trolleys used to run on the Toledo & Indiana and the Chicago Rapid Transit lines.

AN AMAZING group of horsecar lines was found in the Yucatan peninsular of Mexico by Earl Clark, 825 Taft Rd., Cincinnati, Ohio, on a recent visit. Mr. Clark is the compiler of the annual *Directory of Electric Lines* throughout the world.

Reaching Yucatan via the Sureste Ry., built in 1950 into the once inaccessible jungles of this peninsular, he found 2-foot-gage tracks coming down to the stations from distant fields. The crude tram vehicles that carry passengers are mostly flat wooden platforms on single or double trucks, with one or two seats for driver and passengers. Others have no seats, and drivers hang their legs over the front end while passengers drape theirs over the sides.

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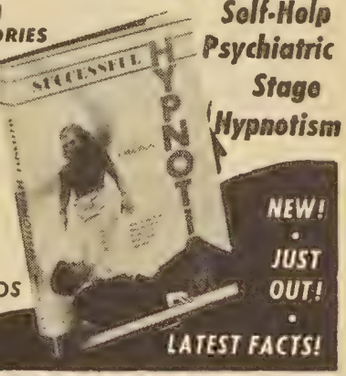

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Mr. Clark came upon horse tramways serving most of Yucatan's railway depots. Riding them were Mayan Indians, the women in gay, embroidered, white gowns and the men with sacks over their shoulders. He noticed little tramcars parked in front of private homes such as automobiles are parked on American residential streets. In that region, the tracks are the roads. When two cars have to pass, one is lifted off the rails to let the other by, as there are no passing tracks. He saw, too, a few abandoned horsecar tracks, with rattletrap buses waiting at depots. Thus "progress" enters the isolated peninsula.

TORONTO streetcars may be gone by 1970, instead of the originally predicted 1978, if city officials have their way, deplores Frank A. Guest, 30 McMaster Ave., Toronto 7, Ontario. And in nearby Oshawa, where trolley freight service is still given on tracks of the Canadian National-controlled Oshawa Ry., attempts are being made to eliminate the trolleys from the downtown business area because of complaints about damage to street paving and noise disturbing hotel guests.

Also in Canada, the London & Port Stanley Ry. is now using passenger coach 10, with No. 8 as a spare, also electric locomotives L2 and L3, and diesels L4 and L5, reports John H. Eagle, Jr., Huntington Hills, Rochester 22, N. Y. The line from Port Stanley to St. Thomas was dieselized last year, and the one from St. Thomas to London will be de-wired soon. But electric operation around London continues because Labatts Brewery won't let a diesel enter their large distillery on the ground that diesel fumes spoil beer.

FOR YEARS we regretted the lack of a juicefan club down South. But now a Texas Division of Electric Railroader's Asso. has been formed by San Antonio and Dallas fans and is publishing a bulletin. The first issue carries a histroy of San Antonio trolley lines and an all-time listing of Texas electric and horsecar routes. Luis L. Torrealba of Mexico City, covers Mexican trolleys. Fans in the Southwest and Mexico are invited to join Texas ERA, 1632 Milan Bldg., San Antonio 5, Texas.

BUENOS AIRES' entire street railway system is being liquidated and sold, laments Arnold I. Reid, Defensa 665, Buenos Aires, R. 46 Argentina. He sent us a newspaper ad calling for bids on purchase of 1,200 streetcars, complete or bodies only. Mr. Reid understands

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A noted publisher in Chicago reports there is a simple technique for acquiring a powerful memory which can pay you real dividends in both business and social advancement and works like magic to give you added poise, necessary self-confidence and greater popularity.

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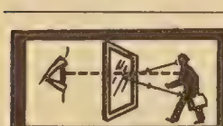

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that no city in his country is interested in buying those cars, not even La Plata, whose trolleys are falling to pieces. Worse yet, the other cities usually follow Buenos Aires example, and this system's change to buses will hasten similar changes elsewhere.

As for the General Urquiza interurban line out of Buenos Aires, our correspondent reports that one of the ex-Key System trains is in service, with three articulateds looking almost the same as when they ran in Oakland, Calif. More cars will come into service shortly.

PITTSBURGH RAILWAYS' stock has jumped nearly double (as we predicted a few years ago, though not for the same reason) because the company, envisioning the future end of most streetcar service and the hopelessness of trying to keep the same riders on substituted bus lines, has diversified its interests. We learn from James Cerny of Pittsburgh that the company is investing in profitable non-rail enterprises.

WHAT A NOVELTY! The trolley system at Bangkok, Thailand, is slowly being replaced by buses, says *Electric Traction,* monthly publication of the Australian Electric Traction Assn., Box 1017, G.P.O., Sydney, N.S.W., Australia. The cars and track are not abandoned but are being moved to other locations in Thailand.

GLASGOW, Scotland will have run its last tramcar by the time you read these pages, reports Walter Broschart, Bogota, N. J., now on an overseas tour. One Glasgow doubledecker, No. 1274, may come to the U.S. through the efforts of James Donald, an English fan now living at 314 Helen St., Linden, N. J.

CAR 356 of Johnstown (Pa.) Traction Co. will follow its mate, 357, to Branford Trolley Museum, thanks to Wm. B. Ketterer, Jr., 42-45 209th St., Bayside, L. I., N. Y., who also helped bring 357 to Branford. At first he intended to buy 356 and scrap it as parts for the other car, but at the urging of several fans he will try to ship it intact to Branford instead. No. 356 is in operable condition but needs newer wheels. Cash donations to help pay for its preservation will be welcomed.

VISITORS to the Seattle World's Fair are invited to meetings of Northwest Trolley Railfans the first Friday evening of each month in the Milwaukee Ladies Clubroom at Seattle Union Station, reports Gene Beauchamp, 2736 34th Ave. S., Seattle 44, Washington.

OPEN trolleys, especially the single-trucked type, are vanishing from the Western Hemisphere, except in museum lines. At Veracruz, Mexico, several were converted to closed cars and one of the few remaining has been bought for use in Ohio, as we have already mentioned.

Sao Paulo, Brazil, also is eliminating its little open trolleys, reports Allan Berner, 871 Aberdeen Rd., Bay Shore, L.I., N. Y. All double-trucked open cars there have been scrapped. Single-truckers will soon meet the same fate.

TWO neat little gadgets designed and made especially for juicefans are a tie bar ($2.75) and a lariat tie featuring an interurban car ($3.25), both in gold or silver, available from Railroad Men's Specialties, P. O. Box 328, Dobbs Ferry, N. Y.

RADAR on the highways we've seen, but is was real news when Gary, Ind., police set radar traps for South Shore interurban trains and *caught* three motormen for violating a city ordinance limiting trains speeds to 45 miles per hour. Tickets were given for speeds 10 to 21 over the limit. Alex Darragh, who told us, indicated that the unusual police action resulted from protests by City Council against speed of trains at Durban Street crossing, scene of several grade crossing accidents. This action was taken to force the line to install the automatic crossing gates.

The South Shore reported a net income of $7,443 in 1961, the first net income in three years. Although passenger service was charged with $500,000 loss, freight gains offset it.

SADLY we announce the deaths of three California fans: Malcolm Miner, a former Pacific Electric employee; Capt. Frederic Shaw, railroad author, and Stuart Liebaum.

Electric Railway Publications

LOCAL LINES OF PACIFIC ELECTRIC; PASADENA, LONG BEACH AND SAN PEDRO, 40 pages, 8½X11", is the most recent in the series of PE histories published at $2 by Ira L. Swett, 202 S. Western Ave., Los Angeles 4, Calif. supplementing the earlier issues, this one covers the smaller local lines of Pasadena, Long Beach and San Pedro Many fine old illustrations include decked-roof cars, stepless "dragons," and Birneys.

TRACTION FANS DIRECTORY 200 pages, 6X9", with listings of individual juicefans, trolley museums, model clubs, and an almost unbelievable amount of data on trolleys makes this a unique and useful reference book. Included is a map indicating all U.S. and Canadian trolley and interurban lines of the past, and another for existing lines. Among the many photos are excellent views of model trolley lines. This valuable work is available from Vane. A. Jones Co., 3749 N. Keystone Ave., Indianapolis 18 Ind., at $2.95 a copy.

1962 DIRECTORY OF WORLD ELECTRIC LINES, by Earl Clark, 37 pages 8½"X11" is the annual revision of his complete global listing of all street railway and interurban lines. A few more have been added from the 1960 edition, while abandoned lines are gone. Included are museums and private electric freight roads. Price $2.50 from the author, 825 Taft Rd., Cincinnati 6, Ohio.

WESTCHESTER'S FORGOTTEN RAILWAY, by Roger Arcara, 64 pages, 8½"X11", illustrated, is history of the New York, Westchester & Boston. This road was built in 1912 to such high engineering standards that it could never get out of debt resulting from the expensive right-of-way construction. All the way it ran in competition with

the New Haven Railroad. Copies of the book may be had at $2.50 from the author at 2405 Marion Avenue, New York 58, N.Y.

MTA RIVERSIDE LINE EXTENSION, 1959, by Edward Dana, 20 pages, 8½"X11", illustrated, is the story of the Riverside trolley line of Boston's MTA from the planning board to completion. The author was associated with the Boston trolley system since his days as a conductor in 1907, becoming president and general manager in 1937. He retired in 1959, just after the Riverside project was opened. This staple-bound publication is Transportation Bulletin 65 of the Connecticut Valley NRHS. Price is $1 from Roger Borrup, Warehouse Point, Conn.

SPEAKING of new publications, every issue of HEADLIGHTS is new until you have read it. Issued monthly by Electric Railroaders' Asso., 145 Greenwich St., New York 6, N.Y., it runs between 8 and 16 pages, 8½x11", covering electric lines everywhere: news, articles, photos, diagrams, maps. A recent special issue features Philadelphia & Western in 13 pages: text and pix, all-time roster, track map, car drawings. This issue, 75¢ to non-members. (For membership info. Write Herman Rinke, national secretary, at the above address.)

ADDRESS of CERA, publishers of "The Great Third Rail," was misprinted in our last issue. It should be P.O. Box 503, Chicago 90, Ill.

PCC CARS OF BOSTON ELEVATED-MTA is a 6-page, illustrated, detailed roster of every PCC car that ran in Boston, with views of each type. Can be had from Boston Street Railway Assn., P. O. Box 102, Cambridge 38, Mass., at 50¢ a copy. This group also offers four 8X10 photos of MTA PCC cars in action for $1.50. All profits go to restoration of ex-MTA car 5706 at Branford. ●

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Last stop of *Direct-Orient Express* (see page 14) is Istanbul, where 1400-year-old St. Sophia, at right, dominates scene near station. No longer do bright red single-truck cars of Istanbul Tramways grind uphill behind this ancient Byzantine church, later a mosque and now a museum. Trams in European side of former Turkish capital were abandoned Aug. 12, 1961.
William D. Middleton, 901 Clarence Court, Madison 5, Wisconsin

Foreign Railways

Novel "day hotel" has been opened by the Swedish State Railways inside Central Station Building at Stockholm. Instead of spending the night, people enjoy part of the day there. These comfortable quarters were designed primarily for arriving sleeping-car passengers who wish a bath or shower or just to go on sleeping for a while. Other travelers visit the unique hotel to shave or get clothes pressed. There are nine rest cabins for men, six for women, three baths, and eight showers. The place is open every day in the week from 7 a.m. to 8:30 p.m.

Swedish Information Service, N.Y. City

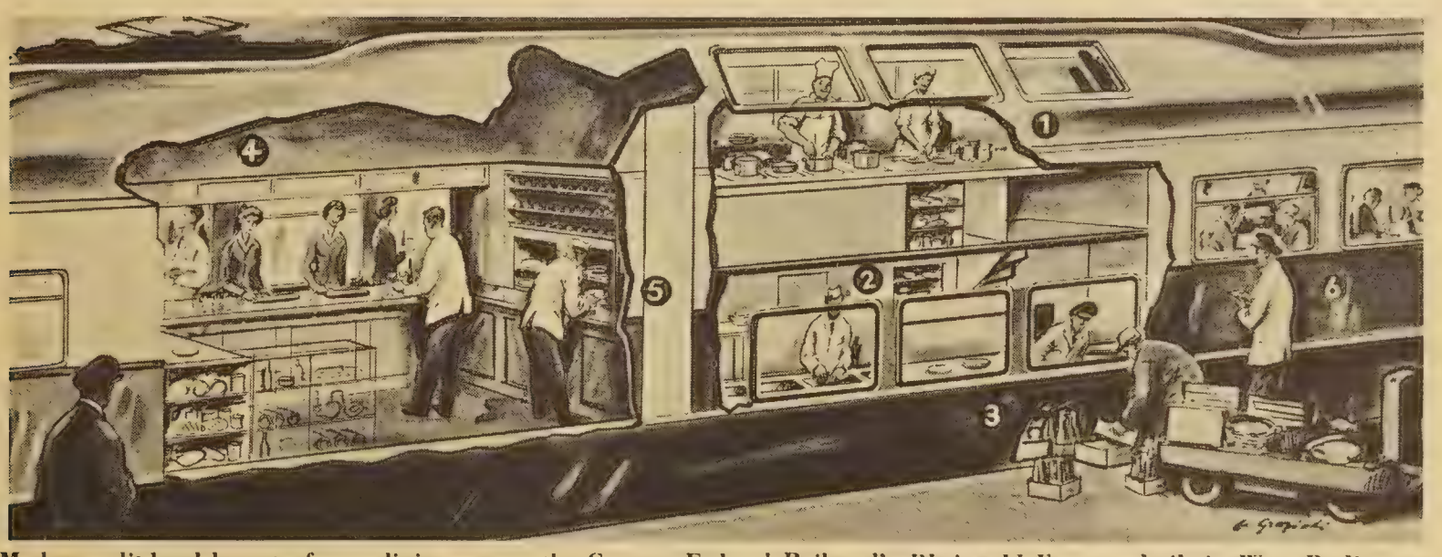
Fenno Jacobs

Before dieselization: British Railways train passes over old Viaduct at Folkestone en route from London to English Channel port of Dover.

Last run of narrow-gage No. 16 of Dominican Republic Sugar Operation, which has bought 4 specially-built General Electric diesels.

Because highway congestion is a major problem in Japan as in many other countries, the people there are building several commercial monorail lines. This one is an amusement attraction inside a Tokyo zoo. Each carriage can accommodate 31 children.

Consulate General of Japan, 3 E. 54th St., New York City



Modern split-level layout of new dining car on the German Federal Railroad's *Rheingold Express*, built in West Berlin, permits faster service to the seating capacity of 48 persons. Interior view shows: (1) the kitchen, (2) dishwashing compartment, (3) loading hatch, (4) serving counter, (5) dumbwaiter from kitchen to serving area, and (6) the dining room.

German Federal Railroad, 11 W. 42nd St., New York City

Diesel Progress
by Sy Reich

THE TREND toward high-speed diesel-electric freight locomotives continues with the introduction of Electro-Motive's new GP30. Freight-train operation can be divided roughly into two problems. One is to start heavy drags and operate them over mountain grades and difficult terrain. The second is high-speed running of piggyback and other hotshots.

The ability to start heavy freight trains and hoist them over mountains comes from long periods of high continuous tractive effort converted to drawbar pull at low speeds. The factors limiting the production of low-speed high-tractive-effort are the factor of adhesion, the locomotive weight, and the maximum current that can be passed through the traction motors without overheating them. The factor of adhesion (or coefficient of friction) is characteristic of wheel and rail conditions and can be improved with the judicious use of sand. It is usually expressed in terms of a percent which indicates that the locomotive can exert a starting tractive effort of that percentage of the locomotive weight.

The factor of adhesion for diesel-electric locomotives on good rail is between 25 and 35 percent. Both the design of traction motors and their ventilation limit the maximum current that can be passed through them continuously without overheating. The power developed by traction motors is fed to them by the main generator, which in turn is powered by the diesel engine itself.

It develops that at low speeds, the maximum power than can be dissipated in traction motors is considerably less than the maximum horsepower supplied by the diesel engine. Thus, at low speeds, the limiting factor is not locomotive horsepower but rather traction-motor heating. Since this maximum-motor current will produce a certain torque (or turning force) at the driving wheels, in order to take advantage of all this torque, the locomotive weight must be equal to at least the torque divided by the factor of adhesion. If the locomotive weight is less than this amount, the drivers will slip before the full tractive effort produced by the motors can be used. If the locomotive weight is more, extra weight must be toted around.

As the locomotive speed increases, the counter emf of the traction motor increases, thus reducing the current through the motor. Now current is no longer the limiting factor. However, in order to propel a train at high speed, the locomotive must develop tractive force to overcome the train's resistance. This tractive force, which is much less than starting tractive effort, must be produced by current flowing through the traction motors.

At high locomotive speed, in order for the generator to "force" current through the traction motors against the counter emf, the generator must develop a high voltage. The power required to develop this current at the voltage required for high locomotive speed is now the limiting factor. At speed, then, it is the locomotive's horsepower, not the weight, coefficient of friction, or traction motor current that limits performance.

Thus to increase the starting tractive effort to move heavier trains at low speed, additional traction motors can be added and the locomotive weight increased simultaneously without increasing horsepower. This has been done on the EMD SD series, Alco RSD series, and FM H-66 series locomotives. To increase train speed, the total horsepower must be increased. This is usually done by raising the number of units on the head end.

Southern Train 47, locomotive 2922.
J. W. Cash, Lithia Springs, Ga.

For example, a certain train can be started easily by one geep. The maximum speed that the geep can attain hauling this train is 30 mph. If the railroad wants to run this same train at 50 mph, it must raise the horsepower at the head end my running two geeps on the train. But the weight and tractive effort produced by this second locomotive does little good for the train at low speeds. If the faster accelleration produced is not required, that second locomotive does not start earning its keep until the train speed reaches 30 mph.

It is pretty expensive to waste a locomotive until the train speed reaches 30 mph. Therefore, the locomotive builders have begun to produce a line of high-horsepower types capable of operating trains at higher speeds than their lower-horsepower four-axle brothers of the same weight, but will not start a heavier train than their brothers. This new series of locomotives is typified by the GE U25B and the new EMD GP30.

These new machines also incorporate a number of changes in electrical and mechanical design to improve performance, simplify maintainance, and extend their lives. Among these features are solid state non-relay control systems, pressurized engine compartments, and simplified control systems.

Orders placed for the new GE U25B include eight for the Santa Fe and eight for the Frisco. We feel sure EMD will have no trouble finding customers for the GP30, which they offer on a unit exchange program to reduce its cost if the railroad wishes to trade in some of its older models on a new unit. Of course, GP30 parts are interchangeable with parts of all previous EMD models.

It is interesting to note that the original high-horsepower high-speed locomotives, the passenger units of EMD's "E" type or Alco's PA type, required two separate diesel engines to generate the desired horsepower. The great weight of two separate engines required the locomotive to ride on six-wheel trucks to reduce the weight per axle to an acceptable figure. Only four axles were powered, with two axles as idlers, because high tractive effort was not desired. Although Alco later went to a single engine in their PA series, it was a montrousity which also required six-axle trucks to carry it. Progress is diesel engine design has enabled EMD, for instance, to increase the horsepower of the original 16-cylinder 16-567 engine used in the FT units from 1350 to 2250 hp for the 16-567D3 supercharged version which is in the GP30. This is equivalent in horsepower to the passenger E8's, yet the weight is low enough for the locomotive to be carried on only four axles.

SOUTHERN RAILWAY SYSTEM

Locomotive Roster Compiled by Sy Reich

Road Nos.	HP	Builder	Bldr.'s Model	Wheel Arngt.	Tract. Effort	Weight	Date	Notes
			Southern Railway					
1950-1953	380	GE	44-ton	B-B	22,000	88,000	1945	
1954	350	GE	44-ton	B-B	22,000	88,000	1941	
2000-2001	660	Alco-GE	S1	B-B	50,500	201,995	1940	
2002-2004	600	GM-EMD	SW1	B-B	49,000	197,000	1940	
2005	660	Baldwin	VO 660	B-B	49,325	197,300	1941	
2006	660	Alco-GE	S1	B-B	48,660	194,700	1941	
2007-2011	600	GM-EMD	SW1	B-B	48,300	193,250	1947	
2025-2029	1600	Alco-GE	RS-3	B-B	60,500	242,000	1952	
2030-2047	1600	Alco-GE	RS-3	B-B	60,580	242,330	1952	
2048-2062	1600	Alco-GE	RS-3	B-B	61,125	244,500	1953	
2063-2077	1500	GM-EMD	GP7	B-B	61,000	244,300	1953	
2100	1000	GM-EMD	NW5	B-B	52,050	208,190	1947	
2101-2130	1500	Alco-GE	RS-2	B-B	60,600	242,400	1949	5
2131-2145	1600	Alco-GE	RS-3	B-B	60,810	243,240	1951	
2146-2155	1600	FM	H16-44	B-B	60,600	242,500	1951	
2156-2180	1500	GM-EMD	GP7	B-B	60,900	243,500	1951	
2181-2196	1500	GM-EMD	GP7	B-B	61,600	246,200	1952	
2197	1500	GM-EMD	GP7	B-B	61,240	244,970	1953	
2200-2204	1000	GM-EMD	NW2	B-B	60,900	243,610	1940-'1	
2205	1000	Baldwin	VO 1000	B-B	58,980	235,920	1941	
2206-2207	1000	GM-EMD	NW2	B-B	60,700	242,900	1941	
2208-2232	1000	Alco-GE	S2	B-B	57,500	230,000	1944-'5	
2233-2284	1000	GM-EMD	NW2	B-B	61,100	244,500	1946-'8	6
2285-2289	1000	BW	DS 4-4-1000	B-B	56,430	225,725	1948	
2290-2299	1200	BLHW	S-12	B-B	60,900	243,580	1952	
2400A,B-2401A,B	2000	GM-EMD	TR-2	(B-B)x(B-B)	122,000	488,000	1947	7
2460-2464	.....	Southern	.....	B-B	63,000	252,000	1952	8
2465-2468	.....	Southern	.....	B-B	62,100	248,300	1957	8
2469-2470	.....	Southern	.....	B-B	62,900	251,700	1959	8
2500-2501	1750	GM-EMD	GP9	B-B	61,300	245,200	1955	
2502-2524	2400	GM-EMD	SD24	C-C	93,700	375,800	1959	
2800-2802	2000	GM-EMD	E6A	A1A-A1A	55,600	323,600	1941	9
2900-2903	2000	GM-EMD	E6A	A1A-A1A	53,900	318,010	1941	10
2905-2922	2000	GM-EMD	E7A	A1A-A1A	52,400	310,900	1946-'9	11
2923-2929	2250	GM-EMD	E8A	A1A-A1A	56,100	334,600	1951	11
2950-2953	2000	GM-EMD	E6B	A1A-A1A	52,000	310,700	1941	12
4100-4127	1350	GM-EMD	FTA	B-B	?	?	1943-'5	13
4128-4206	1500	GM-EMD	F3A	B-B	63,300	253,100	1946-'9	14
4207-4269	1500	GM-EMD	F7A	B-B	60,500	242,100	1949	15
4300-4319	1350	GM-EMD	FTB	B-B	?	?	1943-'5	13
4320-4384	1500	GM-EMD	F3B	B-B	60,400	241,500	1946	16
4385-4428	1500	GM-EMD	F7B	B-B	60,700	242,700	1949-'51	
4429	1500	Southern	.....	B-B	61,100	244,520	1951	

Carolina & Northwestern Railway

Road Nos.	HP	Builder	Bldr.'s Model	Wheel Arngt.	Tract. Effort	Weight	Date	Notes
1-4	1500	Alco-GE	RS-2	B-B	56,600	226,300	1948	
5-8	1600	Alco-GE	RS-3	B-B	59,230	236,900	1950	
9	1600	Alco-GE	RS-3	B-B	61,690	246,760	1951	
10	1600	Alco-GE	RS-3	B-B	61,025	244,100	1953	
11	1800	Alco Pr.	RS-11	B-B	60,700	242,800	1956	

Chattanooga Traction Company

4	600	GM-EMD	SW1	B-B	48,625	194,500	1947	
5	1200	GM-EMD	SW9	B-B	61,125	244,500	1950	

South Georgia Railway

202	600	GE	70-ton	B-B	34,400	137,600	1946	

Live Oak, Perry & Gulf Railroad

300	600	GE	70-ton	B-B	34,400	137,600	1946	
302-303	1750	GM-EMD	GP9	B-B	61,100	244,500	1955	

Atlantic & East Carolina Railway

6-7	400	GE	44-ton	B-B	22,000	88,000	1942	1
9	600	GM-EMD	SW1	B-B	48,630	194,520	1947	2
400-401	1350	GM-EMD	F2A	B-B	60,950	243,800	1945	
500	1000	Alco-GE	RS-1	B-B	58,260	233,040	1951	3
501	1500	GM-EMD	GP7	B-B	59,070	236,280	1951	4

Louisiana Southern Railway

504-505	500	GE	80-ton	B-B	40,000	160,000	1937	

Cincinnati, New Orleans & Texas Pacific Railway

6000-6001	660	Alco-GE	S1	B-B	49,500	198,000	1941	
6010	380	GE	44-ton	B-B	22,000	88,000	1945	
6020-6021	.....	Southern	.....	B-B	62,700	250,700	1954	8
6050-6056	1000	GM-EMD	NW2	B-B	60,600	242,300	1941-'2	
6057-6059	1000	Alco-GE	S2	B-B	57,500	230,000	1941	
6060-6073	1200	GM-EMD	SW7	B-B	60,800	243,200	1950	
6074-6075	1000	Alco-GE	S4	B-B	60,400	241,700	1951	
6100-6105	1350	GM-EMD	FTA	B-B	?	?	1941	13
6106-6113	1500	GM-EMD	F3A	B-B	61,500	246,000	1947	17
6114-6120	1500	GM-EMD	F7A	B-B	60,800	243,100	1950	
6130-6149	1500	GM-EMD	FP7A	B-B	61,000	244,100	1950	
6150-6155	1350	GM-EMD	FTB	B-B	?	?	1941-'3	13
6156-6159	1500	GM-EMD	F3B	B-B	62,000	247,800	1947	18
6160-6183	1500	GM-EMD	F7B	B-B	61,100	244,800	1950-'2	
6200-6205	1500	GM-EMD	GP7	B-B	60,300	241,200	1950	
6206-6207	1500	Alco-GE	RS-2	B-B	60,700	242,900	1949	
6208-6239	1600	Alco-GE	RS-3	B-B	60,885	243,540	1952	
6240-6244	1500	GM-EMD	GP7	B-B	61,100	244,300	1953	
6245-6249	1750	GM-EMD	GP9	B-B	61,400	245,600	1955	
6300-6304	2400	FM	H24-66	C-C	90,700	362,900	1955	
6305-6325	2400	GM-EMD	SD24	C-C	93,500	373,900	1959-'60	
6500-6501	660	Alco-GE	S1	B-B	49,625	198,500	1941	
6504	1000	GM-EMD	NW2	B-B	61,250	245,010	1946	19
6505-6509	1200	GM-EMD	SW7	B-B	61,000	244,100	1950	
6520	380	GE	44-ton	B-B	22,000	88,000	1945	
6540-6544	1500	GM-EMD	GP7	B-B	60,700	242,700	1950	
6545-6550	1600	FM	H16-44	B-B	60,900	243,800	1950	
6700-6701	1350	GM-EMD	F2A	B-B	62,400	249,500	1946	20
6702-6713	1500	GM-EMD	F3A	B-B	61,800	247,300	1946-'7	21
6714-6719	1500	GM-EMD	F7A	B-B	60,900	243,600	1950	
6750-6755	1500	GM-EMD	F3B	B-B	58,900	235,700	1946-'7	22
6756-6758	1500	GM-EMD	F7B	B-B	61,400	245,700	1950	

New Orleans & Northeastern Railroad

6800-6803	1350	GM-EMD	FTA	B-B	?	?	1942	13
6804-6806	1500	GM-EMD	F3A	B-B	62,300	249,100	1947	23
6825-6828	1350	GM-EMD	FTB	B-B	?	?	1942	13
6829	1500	GM-EMD	F3B	B-B	61,250	245,000	1947	24
6840	380	GE	44-ton	B-B	22,000	88,000	1945	
6841	300	GE	45-ton	B-B	22,500	90,000	1941	25
6850-6851	1000	GM-EMD	NW2	B-B	60,600	242,600	1941	
6852-6863	1200	GM-EMD	SW7	B-B	60,800	243,300	1949-'50	
6875-6882	1600	Alco-GE	RS-3	B-B	60,500	242,100	1950	
6898-6899	1750	GM-EMD	GP9	B-B	60,250	241,000	1956	
6900-6905	2250	Alco-GE	PA-3	A1A-A1A	51,840	311,000	1953	
6906-6915	2250	GM-EMD	E8A	A1A-A1A	55,500	329,300	1953	
6950-6953	2400	GM-EMD	SD24	C-C	93,300	373,200	1959	

Georgia Southern & Florida Railway

8200-8203	1200	GM-EMD	SW7	B-B	60,900	243,700	1950	
8210-8213	1500	GM-EMD	GP7	B-B	62,000	248,100	1950	
8214-8215	1750	GM-EMD	GP9	B-B	61,230	244,920	1955	

St. Johns River Terminal Company

8560	1000	GM-EMD	NW2	B-B	61,500	246,100	1940	
8565	600	GM-EMD	SW1	B-B	52,460	209,840	1940	

SOUTHERN SYSTEM NOTES

Roster compiled from Southern System roster book and is accurate as of January 1, 1960. Since it was not compiled with the cooperation of the Southern, we are sure it is not an all-time diesel roster nor are all the renumberings, scrappings, sales, and second-hand purchase notes included. We invite additional authoritative data on these items.

Builders: Alco-GE—American Locomotive Co.-General Electric; Alco Pr.—Alco Products; GM-EMD—General Motors, Electro Motive Div.; GE—General Electric; FM—Fairbanks Morse; BW—Baldwin-Westinghouse; BLHW—Baldwin-Lima-Hamilton-Westinghouse.

Numbered notes:

(1) Renumbered 402-403. (2) Renumbered 404. (3) Renumbered 405. (4) Renumbered 406. (5) 2106 scrapped.

(6) 2235 renumbered 6504. Nos. 2256, 2260 rebuilt with 1200-hp engines. (7) 2400A-2404A renumbered 2400-2404. Nos. 2400B-2404B renumbered 2450-2454. No. 2401 rebuilt with 1200-hp engine. (8) Booster.

(9-12) 2800, 2802, 2900-2903, 2911, 2914, 2915, 2921, and 2950-2953 Re-engined to 2250 hp.

(13) Scrapped. (14) 4132 scrapped. 4128-4170, 4172-4206 rebuilt to F7A.

(15) 4248 scrapped. (16) 4320-4352, 4355-4384 rebuilt to F7B.

(17) 6108 scrapped. Others built to F7A. (18) Rebuilt to F7B. 6157 scrapped. (19) 6504 ex-2235. (20) Rebuilt to F7A. (21) Rebuilt to F7A. 6710 scrapped. (22) Rebuilt to F7B. (23) Rebuilt to F7A. (24) Rebuilt to F7B (25) 6841 formerly 502.

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Not Listed in The Official Guide

by ELLIOTT KAHN

IN ADDITION to our August list of American railroads not mentioned in *The Official Guide*, at least 2,000 others have never "made" *The Guide*. These are industrial railroads, military lines, museum operations and tourist attractions. Such railroads are itemized here by states, cities, and towns.

We use abbreviations such as *AFB* (Air Force Base), *des* (diesel-electric switcher or switchers), *exp.* (express), *gas* (gasoline-burning equipment), *st.* and *n.g.* (standard and narrow gage), and a few others like *GE, GM, elec., hp,* and *comb.* (for "combine") that most readers are familiar with. To save space, we omit Co., Corp., and Inc. from most of the corporation titles. All wheel arrangements (0-6-0, etc.) specify steam locomotives unless otherwise indicated.

Alabama

Adamsville—Republic Steel, trolley locos, mine cars, shuttle cars, 42" gage; Tennessee Coal & Iron Div. of U.S. Steel, 26 trolley locos, shuttle cars, mine cars; U.S. Pipe & Foundry, 9 trolley locos, 200 mine cars, 42" gage.

Alabama City—Birmingham Slag, one GE 480-hp des.; Republic Steel, two 0-6-0, one 0-8-0, 12 des.

All Good—Cheney Line & Cement (3 miles), 2 0-4-0T, one Whitcomb gas 0-4-0, 36" gage.

Anniston—(Ft. McClelland), U.S. Army rr.?

Attalla—Republic Steel, 2 or 3 0-6-0's.

Banks—Alabama Power, one 0-4-0T.

Barton—TVA, one GE 550-hp des.

Bessemer—Pullman-Standard Car Mfg., one 0-4-0T, 2 0-6-0T's, two diesels, 50-100 cars; Tenn. Coal & Iron Div. of U.S. Steel, 2 diesels; U.S. Pipe & Foundry, one GE 550-hp des.

Birmingham—Alpha Portland Cement, one electric loco, cars; American Cast Iron Pipe, one GE 550-hp des. Birmingham Rail & Locomotive, Plymouth gas 0-4-0, Davenport-Besler diesel; (Ensley), Birmingham slag, 4 des (GE550, BLW 800-hp) Connor Steel, one whit. 300-hp des., Lehigh Portland Cement, GM 600-hp; Republic Steel, 3 0-6-0's, one 0-8-0, one 0-6-2, one GE 60-ton des, cars; Tenn. Coal & Iron Div. of U.S. Steel, 28 trolley locos, shuttle cars, mine cars, n.g.; (Ensley) Tenn. Coal & Iron, 14 0-4-0T's, 20 diesels, over 100 cars, st. and 36" gage; U.S. Pipe & Foundry, 12 diesels cars.

Black Diamond—Black Diamond Coal Mining, loco and mine cars, 42" gage.

Blossburg—Brookside-Pratt Mining (4 miles), 4 trolley locos, 114 mine cars, 26" gage.

Bridgeport—Tennessee Valley Authority (Widows Creek plant), diesels.

Brilliant—Brilliant Coal, 10 locos, 300 mine cars, 36" gage.

Bucks—Alabama Power (Barry plant), two 0-4-0T's.

Chapman—W. T. Smith Lumber, one 2-6-0 woodburner, one 4-4-0 on display, 4-wheel GE des, several dozen log cars.

Daleville—(Ft. Rucker), U.S. Army railroad, ?

Demopulis—Lone Star Cement, ?

Docene—Tenn. Coal & Iron Div. of U.S. Steel, 30 trolley locos, shuttle cars, mine cars, n.g.

Dulomite—Woodward Iron, 19 trolley locos; Dolcifo Quarry, two Plymouth diesels. Mine cars, 36" gage.

Empire—De Bardelben Coal, 12 trolley locos, 127 mine cars Birmingham slag, 3 electrics.

Fairfield—Tenn. Coal & Iron Div. of U.S. Steel, 20-25 diesels, over 100 cars, st. Flattop—U.S. Pipe & Foundry, 6 trolley locos, 400 mine cars, 42" gage.

Florence—Transportation Service, Inc., one GE 380-hp des (remote radio controlled).

Gasden—Alabama Power, 0-4-0 fireless, one 150-hp des.

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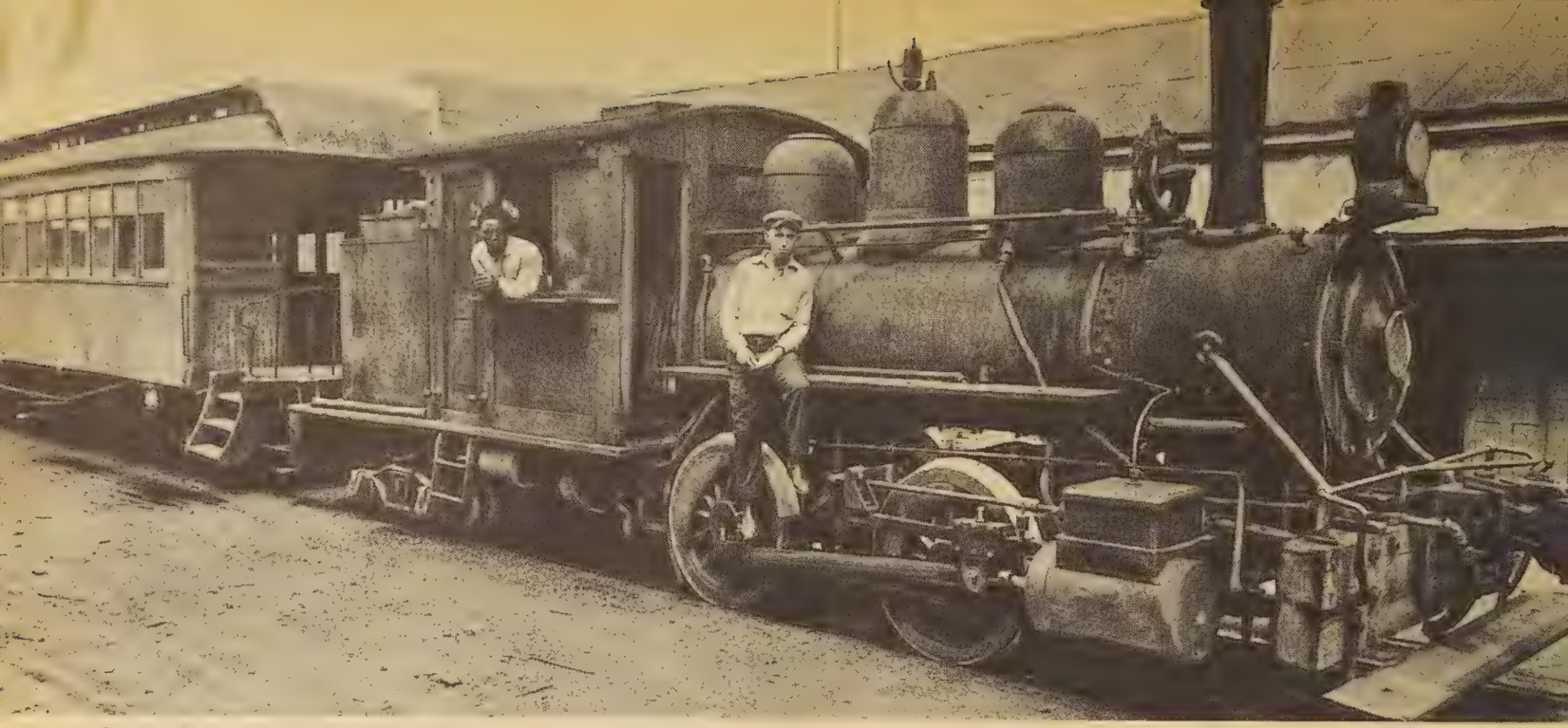


Georgia's Augusta Transfer & Tramway (now abandoned) once had a teen-age girl as engineer on the train pictured here.

Gorgas—Alabama Power, 3 whitney 500-hp, one GE 550-hp, several cars, all st. gage; and 16 trolley locos, 32 shuttle cars, 290 mine cars, all 48" gage.

Holt—Central Foundry, 3 GE 300-hp des; De Bardelben Coal, 2 0-8-0's, one 4-wheel elecrtic loco; Gulf States Paper, one GE 380-hp des.

Hueytown—Tenn. Coal & Iron Div. of U.S. Steel, one diesel.

Hunter—Montgomery Rugnemore Gravel, one GE 300-hp des.

Huntsville—Redstone RR. (U.S. Army Ordinance Missile Command), diesels, cars.

Kellerman—Twin Seams Mining, 3 Shays.

Leeds—Universal Atlas Cement Div. of U.S. Steel, one GE 300-hp. des.

Margerum—Ala, Asphaltic Limestone (2 miles), one 0-4-0T, one 2-8-0, one ALCO 1000-hp. des.

Mobile—Ala. Drydock & Ship bldg., several diesels; Ideal Cement, one whitney 150-hp des; Ala. Grain Elevator, one GE, one 50-hp., one Plym. 130 hp; Alcoa, 3 GE 720-hp des, cars; Winston Paper, one diesel.

Montgomery—Montg.-Roquemore Gravel, one diesel; (Maxwell Air Force Base), U.S. Air Force railroad, one 0-4-0 diesel.

Mt. Vernon—Mobile River Saw Mill, one GE 300-hp des, one 2-6-2 woodburner.

Mulga—Woodward Iron, 19 trolley locos, mine cars, 44" gage.

Myrtlewood—Neheola Paper, one GM 600-hp des.

North Birmingham—Standard Casket Factory (⅛ mile), one elec. loco; Lone Star Cement one whit. 320-hp des; U.S. Pipe & Foundry, BLW diesel.

Pratt City—Tenn. C&I Div. of U.S. Steel, 41 trolley locos, shuttle cars, mine cars, n.g.

Pride—Tenn. Vall. Authority (Colbert plant), one GE 550-hp des, other diesels.

Sayreston—Republic Steel, trolley locos, shuttle cars, mine cars, 42" gage.

Selma—(Craig AFB), U.S. Air Force rr., ?

Sylcauga—(Gantts Quarry), Ala. Marble, 0-4-0T.

Tarrant—Ala. By-Products, 2 0-6-0's, one GM 900-hp des, 3 elec. 3rd-rail locos, several cars.

Thompson—Birmingham Slag, one Porter, 380-hp des.

Tuscumbia—Tri-State Limestone, one Atlas, 150-hp des.

Wilsonville—Southern Elec. Generating 1 GE 180-hp, 2 GE 600-hp des.

Woodward—Birmingham Slag, 1 Euclid 100-hp. diesel-mech., 1 GE 600-hp des; Woodward Iron (52 miles), 3 2-8-0's 2 2-8-2's, one 2-10-0, one Porter 550-hp, 2 elec. locos, 556 cars.

Alaska

None—Seward Peninsula RR. (80 miles), several gas rail-motor cars, 36" gage.

Wards Cove (near Ketchikan), Ketchikan Pulp, one diesel.

Arizona

Ajo—Phelps-Dodge Copper, New Cornelia branch (44 miles), 3 GM 1200-hp des, 6 GM GP-7's and 3 GP-9's, 8 Sterling-West. elec. diesel locos, diesels, several hundred cars.

Coronado Mines (near Morenci)—Coronado RR. (one mile), 3 steam locos, several cars, 20" gage.

Escuela (Tucson)—American Smelting & Refining, one Trackmobile.

Flagstaff—Southwest Lumber Mills, Inc. (78 miles), one 2-8-0, one 2-6-6-2 (on display) 2 Shays, 5 GM des, over 100 logging cars, caboose, etc.

Hayden—Kennecott Copper, one 4-wheel diesel (also leases SP&PE diesels), over 100 cars.

Morenci Mines—Phelps-Dodge (35 miles), 5 GM 1000-hp des, 8 GM GP7's, over 100 cars.

McNary—Southwest Forest Industries (68 miles plus siding), see Flagstaff listing.

Ray—Kennecott Copper (20 miles), 2 Alco 1500-hp des, cars.

Tucson—(Davis-Monthan AFB), U.S. Air Force railroad, one GM 1000-hp des, one Trackmobile).

Arkansas

Arkadelphia—Reynolds Metal, one Trackmobile.

Camden—Shoemaker Ordinance plant, one diesel. Crossett—Crossett lumber and Crossett Chemical, one 2-8-0, one GE 300-hp des, 8 tank cars.

Dequeen—Dierks Forests, Inc., one diesel, several loco cranes, cars.

El Dorado—Lion Oil, one diesel.

Fordyce—Fordyce Lumber, one GE 150-hp des.

Forest City—St. Francis Gravel, ?

Fort Smith—Unknown zinc smelter, ?

Hackett—Quality Excelsior Coal, trolley loco, battery locos, mine cars.

Hot Springs—Malvern Gravel, ?

Huttig—Olin Mathieson Forest Products, one gas 0-4-0.

Lewisville—Meriwether Gravel, 2 2-6-0's, one GE 400-hp des.

Little Rock—Big Rock Stone & Material, leased Rock Island des; U.S. Air Force railroad, ?. Acme Brick, one 0-40T, 1 Plym. gas 0-6-0, several 4-wheel cars, n.g.

Malverne, A. B. Cook Lumber, diesels; Magnet Cove Barium, ?; National Lead, diesel.

Mountain Pine—Dierks Forests, Inc., one 4-6-0, one GM diesel, loco crane, log cars.

Pine Bluff—Dierks Paper, one Trackmobile, loco crane; Pine Bluff Arsenal, diesels.

Truman—Pointsett Lumber & Mfg., one 0-4-4T, one 2-6-0, one Heisler, one GE 150-hp des, cars.

Wilton—Unknown gravel, one GM 600-hp des.

California

Alameda—U.S. Navy railroad, ?

Alhambra—C. F. Braun, one diesel.

Alta Loma—Chadwell O' Connor, 0-4-0T woodburner.

Azusa—Consolidated Rock Products (3½ mi.), one Plymouth diesel.

Bassett—Consolidated Rock Products (2 mi.), one GE 300-hp des.

Buena Park—Ghost Town & Calico RR. (Knott's Berry Farm) 2 2-8-0's, one 0-4-0T, one gas 0-4-0, one gas rail-motor, 5 cable cars, one caboose, 3 coaches, 2 parlor cars, one business car, 36" gage.

Camp Pendelton—U.S. Marine Corps. (¾ mi.), 36" gage.

Claremont—Consolidated Rock Products, ?

Chester—Collins Pine, one 600-hp des.

Davenport—Pacific Coast Cement & Aggregates, Inc., one electric, 36" gage.

Declezville—Columbia Construction, one Shay (abandoned).

Disneyland (Anaheim)—Santa Fe & Disneyland RR., 2 4-4-0's, one 2-4-4T, one 2-4-0, 4 coaches, one obs. car, 10 excursion cars, frt. cars, 36" gage.

Eagle Mountain—Kaiser Steel Co. (52 mi. plus sidings), 11 Baldwin 1600-hp des.

Edwards—U.S. Air Force railroad, ?

Elton—Pacific Coast Cement & Aggregates, GE des.

Fairhaven—Mutual Plywood, one diesel made from Heisler.

Fluhr—U.S. Air Force railroad, ?

Fontana—Kaiser Steel, (65 mi.) 16 diesels, cars, st. and n.g.

Fort McClelland—U.S. Army railroad, one Whitcomb des, one GE des.

Fort Ord—U.S. Army railroad,?

Greenville—Indian Valley Mining, battery elec. loco.

Hamilton Field—U.S. Air Force railroad, ?

Hercules—Hercules Powder Co., one diesel.

Los Angeles (Maywood)—Bethlehem-Pacific Coast Steel, diesels, st. and n.g.; (Travel Town), Crystal Springs & Southwestern RR., one 4-6-0, 3 coaches, other equipment on display, 36" gage; Inland Steel Products, diesel.

Los Gatos—Wildcat RR., 0-4-0T, 6 other amusement-park steamers, 18" gage.

Madison—Madison Sand & Gravel, ?

March Field—U.S. Air Force railroad (3 mi.), 2 44-ton des.

Mare Island (Vallejo)—U.S. Navy railroad, ?

McCloud—McCloud River Lumber, one st.-gage 600-hp GE des, and one n.g. Vulcan 0-4-0 and n.g. diesel-mechanical loco.

Mococo (near Martinez)—Mountain Copper, one diesel.

Mojave—Calif. Portland Cement, ?

Monolith—Monolith Portland Cement (3 mi.), one diesel, cars, n.g.

Newhall—Gene Austry's Melody Ranch, one Shay, one 2-8-2, 36" gage.

Oakland—Kaiser Engrs. & Contractors, Inc., one Baldwin 1500-hp des.

Old Woman Springs—Dale Gentry Ranch, Cottonwood & Southern RR. (3 mi.), one 0-6-2T, 36" gage.

Oleum—Union Oil, one diesel.

Oroville—Kaiser Rock, 3 0-4-0T's (line out of service).

Pabrico (near Niles)—Pacific States Steel, diesel.

Permanente—Permanente Cement, diesel.

Perris—Orange Empire Trolley Museum, 16 streetcars, 10 interurban cars, one exp. motor, 2 line cars, 3 work motors, 42" and st. gage.

Pittsburg—Columbia-Geneva Div. of U.S. Steel, ?

Plaster City—U.S. Plaster (10 mi.), 3 GE 500-hp des, gondolas, 36" gage.

Pleasanton—(Parks AFB), U.S. Air Force railroad, ?; Pac. Coast Cement, one GE des.

Pt. Richmond—Blake Brothers, one 0-4-0, diesel-mech. loco, Heisler.

Radum—Kaiser Aggregates, diesel.

Roseville—Antelope & Western RR. (one mi.), one 0-4-T, one 4-6-0, one cable-car Heisler 2-6-0, one private car, one flatcar, one log car, 36" gage; Pacific Fruit Express, one 600-hp Ge des, 5353 reefers, 54 exp. reefers, 300 flatcars.

Ryan—Pacific Coast Borax (6 mi), 24" gage.

Sacramento (nearby)—U.S. Air Force (Liquid Rocket Test Area, one Trackmobile.

St. Andreas—Calveras Portland Cement, one gas 0-4-0.

Saltus—Leslie Salt (5 mi.), 3 Plymouth gas 0-4-0's, 4-wheel cars, 36" gage.

One of the 7 Shays that used to run on the now-abandoned West Side Lumber line in California.

Robert Field, 107 Stanyan St., San Francisco 18, Calif.

San Diego—U.S. Navy, one GM 300-hp des, etc.
San Diego—Western Salt (¾ mi.), 24" gage.
San Gabriel—Grizzly Flats RR., 2 0-4-2T's, one 2-6-0, 3 cars, 36" gage.
Scotia—Pacific Lumber, 3 940-hp GE des, one 2-8-2, over 100 cars.
South San Francisco—Bethlehem Pacific Coast Steel, gas and diesels, cars, st. and n.g.
Spreckles—Spreckles Sugar, GE des.
Standard—Pickering Lumber, 4 diesels, 6 Shays, log cars, cabooses.
Stockton—McCormack & Baxter Creosoting, ?; Stockton Ordinance Depot, ?
Suisun—(Travis AFB), U.S. Air Force railroad, ?
Surf—(Vanderberg AFB), U.S. Air Force railroad, ?
Torrance (Los Angeles)—Columbia-Geneva Steel Div. of U.S. Steel, Baldwin and GE diesels; National Supply, diesel.
Tuolomme—West Side Lumber, 7 Shays, line being torn up, 36" gage.
Victorville—Mojave Northern RR., Southwest Portland Cement, (8 mi.), 3 0-6-0T's, 3 GE 600-hp diesels; (George AFB) U.S. Air Force railroad, ?
Watson—Richfield Oil, one diesel.
Yermo (Ghost Town)—one 0-4-2T, several cars.

Colorado

Bowie—Juanita Coal & Coke (5 mi.), battery el. locos, one shuttle car, 175 mine cars, 42" gage.
Brighton—Great Western Sugar, one 0-4-0T.
Carbondale—Thompson Creek Coal & Coke, 4 locos, mine cars, 36" gage; Climax, Colo., Molybdenum, elec. locos, 4-wheel cars, 36" gage.
Craig—Colowyo Coal, trolley locos, shuttle cars, mine cars, n.g.
Dacono—McNeil Coal, one battery elec. loco, 4 trolley locos, mine cars, 36" gage.
one diesel; P. S. of Colo. (Zuni plant).
Denver—Denver Board of Water Comm., n.g.; Koppers Co., one diesel, several cars; Morse Bros. Machinery, ?; Pub. Serv. of Colo., one diesel each at Araphoe, Cherokee, and Zuni plants.
Florence—W. D. Corley (one mi.), 2 locos, 123 mine cars, 42" gage; Ideal Cement, ?
Frederick—Boulder Vall. Coal, 5 trolley locos, 3 battery locos, 7 shuttle cars, 300 mine cars, 36" gage.
Johnstown—Great Western Sugar, one GE 300-hp des. (GWS plants at Fort Collins, Longmont, Loveland Ovid, and Sterling, each have one 0-4-0T; Fort Morgan plant has 2 0-4-0T's.)
Magic Mountain (Denver)—Magic Mt. Ry., one 2-8-0, 3 pass. cars, 36" gage. (Line bankrupt, may never run again.)
Oliver—Minerals Development Corp. of Colo. (one mi.), one trolley loco, 3 battery locos, 4 shuttle cars, 200 mine cars, 42" gage.
Palisade—Kerr Coal, 3 trolley locos, mine cars, 36" gage.
Rocky Ford—American Sugar, one diesel.
Royal—Royal Coal (8 mi.), 4 trolley locos, 5 shuttle cars, 140 mine cars, 40" gage.
St. Vrains—Clayton Coal, Lincoln Mine, 6 shuttle cars, n.g.; C.C., Washington Mine, 8 locos, 6 shuttle cars, 400 mine cars, 36" gage; Imperial Coal, Eagle Mine, 5 trolley locos, 6 shuttle cars, 450 mine cars, 36" gage and Imperial Mine, 2 battery locos, 5 trolley locos, 4 shuttle cars, 200 steel mine cars, 200 wooden mine cars, 36" gage.
Salida—Koppers Co., 0-4-0T on display, one gas 0-4-0, cars, 24" gage.
Somerset—Miberals Dev. Corp. of Colo., 4 trolley locos, 4 battery locos, mine cars, 40" gage.
Valdez—Colo. Fuel & Iron, 10 trolley locos, 16 battery locos, 550 mine cars, 36" gage.
Weston—Colo. Fuel & Iron, shuttle cars, mine cars, trolley loaders, incline and level railways, n.g.

Connecticut

Brigeport—Bullard Co., Jenkins Valve, Davenport 150-hp des; Remington Arms, 2 gas-el. box motors, one GE 380-hp des, boxcars; United Illuminating, one GE 380-hp des.
Bristol—New Departure Ball Bearings, one diesel.
Danbury—Sperry Rail Service, several diesel and diesel-elec. rail-motor cars.
East Haven—Branford Electric Ry. Assn., 30 streetcars, 5 interurbans, 2 subway cars, 3 electric locos, 2 exp. motors, 10 work cars, 2 cabooses.
East Hartford—Case Bros. Paper Mills (½ mile), one Plymouth gas 0-4-0, one boxcar.
Hartford—Hartford Electric Light, (¾ mile), one diesel.
New Britain—Stanley Works (2 miles) one fireless 0-4-0.
New Haven—American Creosote, one trolley loco, cars, n.g.; Connecticut Coke, 2 fireless 0-4-0's; New Haven Terminal RR., one GE 150-hp des; Tad Jones Oil, one 4-wheel diesel.
North Branford—Branford Steam RR. (8 mi.), 2 GE 380-hp des, hopper cars. (Reader says line is intrastate common carrier.)
Portland—Anderson Oil (½ mi.), one gas 0-4-0.
Thompsonville—Bigelow-Sanford, one gas 0-4-0.
Warehouse Point—Conn. Electric Ry. Assn., one 0-4-0T on display, 20 streetcars, one interurban car, one snowplow motot, 3 exp. motors, one work motor, 2 work cars.
Wallingford—Wallingford Steel, one GE 150-hp des.
Waterbury—American Brass, one Trackmobile.

Delaware

Claymont—Luria Bros. (ex-CF&I plant, awaiting sale or scrap), 2 GE 380-hp des.
Newport—Koppers Co., ?
Wilmington—Pusey & Jones, one diesel.
Wilmington—Pyrites Co., one diesel.
Wyoming (Dover AFB)—U.S. Air Force railroad, ?

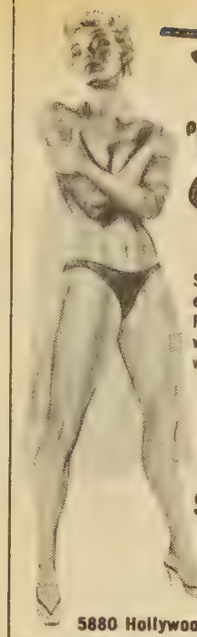
District of Columbia

Buzzards Point—Potomac Electric Power, one fireless 0-4-0.
Washington—Health, Education, & Welfare Dept. (¾ miles), one 0-4-0T.
Washington—Potomac Electric Power, 2 fireless 0-4-0's.
Washington—"The Senate Subway" (½ mile), 2 electric pass. cars n.g.
Washington—U.S. Naval Weapons Plant (9.3 miles,) 2 or 3 diesels, 6 loco cranes, 77 cars.
Washington—United Clay & Brick, n.g.

Florida

Achan—International Minerals & Chemical, ?
Archer—Maddox Foundry, one st.-gage 2-4-0, several n.g. 0-4-0T's.
Brevard—Carr Lumber, one Whitcomb 150-hp des.
Bunnell—Lehigh Portland Cement, ?
Canal Point—U.S. Sugar Corp. one 4-6-2, one GM 1000-hp des.
Cecil Field (Otis)—U.S. Air Force, railroad, ?
Century—International Paper, one GE 150-hp des, several cars, Alger-Sullivan Lumber 2-6-2 on display.
Chattahoochie—Gulf Power, one 0-8-0.
Clewiston—U.S. Sugar, one GM 1000-hp des.
Copeland—J. C. Turner Lumber, 3 4-6-2's, one 2-6-0 (line torn up).
Coronet—Smith-Douglas, one 4-wheel diesel, 4-wheel cars.
Foley—Buckeye Cellulose, ?
Eglin AFB (Ft. Walton Beach)—Back & Forth RR., 2 diesels, one 2-8-0, several cars.
Gainesville—Cabot Carbon Co., 2 0-4-0T's one 0-4-0.
Gainesville—Koppers Co., ?
Gulf Hammock—Paterson-McInnes Lumber, one 2-8-0 (shut down).
Jerome—C. J. Jones Lumber, 0-4-0T, other steam, locos, log cars.
Lacoochee—Cummer Sons Lumber, one 2-6-2, one 4-6-0. (shut down).
Miami—Lehigh Portland Cement, one GM 600-hp des.
Mulberry—International Minerals & Chemical, elec. locos, cars.
Mulberry—Virginia-Caroline Chemical, gas 0-4-0.
Nichols and ?
Noralyn—Virginia-Carolina Chemical, ?
Patrick AFB (Cocoa-Rockledge)—U.S. Air Force RR., ?
Peace Valley—International Minerals & Chemical, ?
Pembroke—Virginia-Carolina Chemical, ?
Pensacola—U.S. Navy railroad, diesel.
Perry—J. C. Turner Lumber, one 2-6-2, one GE 150 hp des.
Pierce—American Agriculture Chemical, (5 miles), one 0-6-0 on display, a des.
Port St. Joseph—St. Joe Lumber & Export, one 2-6-2 on display, one gas 0-4-0.
Rockdale—Gold Coast RR. (3½ miles), one 4-6-2, one bag. car, one comb., one coach, one business car, 2 cabooses.
Steddon Island—Dantzler Lumber, ?
Tampa—Tampa Sand & Material, one Whitcomb 0-4-0 diesel, one Davenport 0-4-0 diesel; U.S. Phosphoric Products, ?; Sol Warner, one 0-4-0 woodburner.
Tenoroc—Smith-Douglas, one diesel.
Valparaiso—U.S. Air Force railroad, ?

(Continued in Next Issue)



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RAILROAD HOBBY CLUB

by Sy Reich

The last doodlebug east of the Mississippi, perhaps the last in North America, made her farewell run May 29th on the Pennsy between Red Bank and Trenton, N.J. Ex-gas-electric car No. 4666 (shown here at Freehold) carried about 75 passengers, including Steve Maguire, on what was also the final passenger "train" on the old Sea Girt-Monmouth Jct. line.
Photo by Stephen D. Maguire

OLD 100, runner-up as the last steam locomotive to be used on Weyerhaeuser logging railroads, has been donated to the city of Sutherlin, Ore., for permanent exhibition.

Sy Reich

The 41-year-old 2-6-2 made her last log-hauling run at Weyerhaeuser's Springfield branch in October, 1958. She was on standby duty until the end of rail logging on the Sutherlin line in 1960.

Only one other steam locomotive outlasted "Old 100" in active service on Weyerhaeuser lines. She was a giant Mallet operated by the Klamath Falls branch, put on exhibit recently at the company's mill headquarters there.

No. 100 was acquired by Weyerhaeuser in 1937 from the San Francisco Water Department, which had used her in building Hetch Hetchy Dam near Yosemite National Park. She served on the Vail Tree Farm in Western Washington before being assigned to Springfield in 1948. The Prairie type locomotive was built by Cooke in 1921.

C. W. Preppernau, logging manager, said "Old 100" made her last log run with a four-man crew. The late Rodney Jones was engineer, with Edward Gray firing. Dempsey Coor and Willard Lee were brakemen.

Diesel-powered engines continue to bring some of the Springfield branch logs to the mill by rail, down the new line from the Mohawk Valley.

"Old 100" becomes the third Weyerhaeuser steamer to go on exhibit as a permanent reminder of the Pacific Northwest's booming "highball days" of logging. In addition to the Klamath Falls steamer, another Mallet is displayed at Longview, Wash.

The Steam Parade

Maine Central's Consolidation No. 519 is sitting outside the roundhouse at Waterville with her rods down. MEC's Pacific No. 470, which is on exhibition in front of the old depot there, will have to be moved to make way for another expensive, space-wasting highway. We assume she will be displayed at another location.

Information on old Vandalia steam engines which were used on Norfolk & Portsmouth Belt Line is sent to us by L. D. Moore, Jr., 2102 Parker Ave., Portsmouth, Va., as a supplement to our Vandalia all-time roster (June issue). All were built by Schenectady and came to the N&PBL from the Pennsy in 1929-'31.

Date Built	N&PBL Number	Ex-PRR Number	Ex-Van. Number	Date Scrapped
1906	30	8771	219	1951
1913	31	8776	226	1948
1907	32	8782	245	1948
1907	33	8780	243	1948
1907	34	8777	240	1950
1906	35	8772	220	1951
1904	36	8773	221	1956
1906	37	8770	218	1956

Notes: 34 was St. Louis, Vandalia & Terre Haute No. 194; 36 was TH&I No. 3.

W. H. B. Jones tells us that the Rockton & Rion has inspected the Bonhomie & Hattiesburg Southern's 300 and that the Mobile & Gulf has inquired about the possibility of buying their 250. No decision has been made as we go to press.

Bill Pennington reports that the Virginia & Truckee engine on display is No. 27, not No. 7. V&T railcar 99 is owned by Graham Hardy and stored at Virginia City, Nevada. Carson-Tahoe Lumber & Fluming Company's 4 (ex-Lake Tahoe Ry. & Transportation Co. 1) is on display next to the old Mint building at Carson City, Nevada, while SP narrow-gage 8 is at 310 Mountain St. in the same city. V&T McKeen motorcar body and a Nevada Copper Belt motorcar body now form part of a restaurant outside Carson City.

Setouts and Pickups

A new reader, Roger Cox of England, writes: "Having found out recently about *Railroad Magazine*, I realize what I had been missing for years. Your articles and photos really knocked me out. By comparison, English railway magazines seem dull." (Roger is in our current *Switch List*.)

David Plowden, who tops the list of *Railroad Magazine's* cover photographers and has a b&w shot on page 13 of this issue, is having a one-man exhibition of his photos of various phases of railroading at Suffolk County Museum, Stony Brook, Long Island, N.Y. The same museum has LIRR No. 38, a 4-6-0, Class G-5, on permanent display.

Midwest Railroad Society, a new club, has been organized in the Chicago area. "We cater to all types of railfans: steam, diesel, and electric," writes Roy F. Wake, vice president, 1429 W. Congress Parkway, Chicago 7, Ill. The Society issues a monthly mimeographed newsletter called "The Mail Train." It meets the second Friday of each month and is planning several trips. Dues range from $3 to $6 a year, depending on type of membership.

John Waddington has made 5x7″ full-color reproductions of his original watercolor paintings of steam railroading for use as greeting or correspondence cards. A box of 8, with envelopes, is available at $2, or 11x14″ color prints of same for framing, $2.50 each. John lives at 955 S.W. Westwood Dr., Portland, Oregon.

Some cancelled New York, Westchester & Boston Ry. $1000 bonds in mint condition are offered for sale by Wm. B. Young, 17 River St., East Haven, Conn., at an undisclosed price. Proceeds go toward housing Connecticut Co. double-truck Birney No. 3000 (Wason, 1922).

A new railroad movie has just been issued by West Wind Productions, David I. Rees, executiv director, P.O. Box 325, Ajo, Arizona. Entitled "Coronado Railway," it is 16mm (sound and silent) and 8mm, Eastmancolor, 8½ minutes. This film takes you on a present-day trip over the old roadbed of the 20″-gage common-carrier railroad that ran between Clifton and Metcalf, Ariz., from 1876 to 1916. Its construction was quite an engineering feat. The movie includes close-ups of Porter 0-4-0T. Action a-plenty. Dave will gladly supply additional info.

New York Central locomotive roster in our June issue is amended as follows by Z. Hansen: Note 1 should read,

"Renumbered from 6000 to 3400 to 3200 to 1100 to 100. Originally 1-D-1 wheel arrangement." Note 2: "Renumbered from 3401-3434 to 3201-3234 to 1101-1134 to 101-134." Note 3: "Renumbered from 3235-3246. All scrapped." Note 9: "Renumbered from 3247 to 1147 to 247. Scrapped." Note 59: "Renumbered from 1550 to 1510 to 510 to 500." The only diesel-electric unit omitted was Class DBP 1500, built by Alco in 1929. This unit was scrapped. Units 4212 and 4304 were originally built to haul the GE exhibition train "More-Power-to-America Special." Class DRSP-3a units 7300-7301 have been repowered by EMD to 1750 hp. Units 7100-7118 were originally owned by the IHB. Units 8400-8405 are not CR&I but rather NYC.

Coming Events

LONG ISLAND RAIL ROAD offers one-day package tours of the Island every Sunday until Oct. 21. Several Saturdays until Oct. 6 also have special tours. Rates run from $4.50 to $8.50 for adults, and from $3 to $5 for children. Several include meals. All trips begin and end on modern air-conditioned trains, but many also feature bus and boat rides. Included are visits to famous homes and gardens, such as Sagamore Hill, (Teddy Roosevelt's home at Oyster Bay), and the Phipps Estate at Old Westbury, July 22, Aug. 12, and Sept. 2 and 30. The famous 300-mile "Around Long Island Tour," the one that gave birth to the program in 1954, will run August 5, 26, September 16, and Oct. 7 and 21. It includes a train ride to Greenport, a bus tour across Shelter Island and out to Montauk Lighthouse, and a train ride back to New York from Montauk or Riverhead. Only $6.50 for this one (kids, $4).

September 23 will see a trip to Greenport, and thence New London via boat, and return, for $5 and $3. For brochure and further information write Long Island Rail Road Tour Department, Jamaica, 35, N.Y.

Pine Creek Railroad, a volunteer, non-profit organization, operates steam power every Sunday from noon to dusk during the summer. Motive power includes an ex-Ely Thomas Lumber Co. Shay. A Mogul from a banana plantation in Panama is expected to be ready by fall. Pine Creek is located on U.S. 9, four miles iorth of Freehold, N.J. Office: 5 Water St., South River, N.J. Phone: (201) CL 7-2020.

October 13-14: Southern Pacific, Del Monte to Monterey using observation 2901. Central Coast Railway Club, PO Box 783, San Jose 6, Calif.

Aug. 20: Steam Giant Ramble from Detroit to Kalamazoo over the Grand Trunk Western using No. 6323. Charles R. Foss, National Museum of Steam Propulsion, 5087-Rt. 1, Cherry Valley Rd., Middleville, Mich.

Aug. 24-Sept. 3: Sixth Annual "Cariboo Country Special," a ten-day tour to western Canada from San Francisco sponsored by the Western Pacific. Itinery includes full day at Seattle World's Fair, GN and CNR to Jasper National Park, PGE to Fort St. John and via Cariboo country to Vancouver. WP, GN and SP&S freight-only "Inside Gateway Route" to be used between Oakland and Pacific Northwest. Details from Public Relations Dept., Western Pacific RR, 526 Mission St., San Francisco 5, Calif.

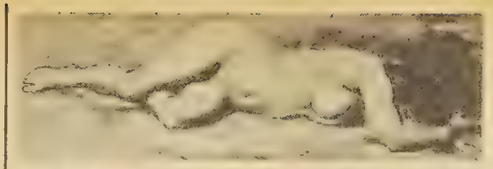
August 31-Sept. 3: Spokane, Portland & Seattle branch from Sacramento, Calif. to Astoria. Central Coast Railway lub, P.O. Box 783, San Jose 6, Calif.

August 26: Portland, Maine, to Island Pond, Vt., over scenic Canadian National route. Consist will be gondola and coach. Leaves Grand Truck Station, Portland, 8 A.M. EDT, returns 8 P.M. Fare $10. Contract Jesse F. Libby, Jr., Portland Div., Railroad Enthusiasts Inc., 344 Pine St., South Portland, Maine. Reservations close Aug. 13.

August 31-Sept. 3: Annual Labor Day Weekend convention of the National Railway Historical Society will be held in Atlanta, Ga. Four trips are scheduled:

Friday — behind a Shay engine on the Graham County Railroad, following beautiful Talula Creek Gorge and some pretty mountain country. Saturday —double-header steam trip from Atlanta to Macon, Ga., over the Central of Georgia behind an ex-Savannah and Atlanta 4-6-2, built in 1918, and a Chattachoochee Valley 2-8-0 built in 1924. Saturday night — banquet at Atlanta's Dinkler Plaza Hotel; Sunday, "Hook and Eye Trip" over the L&N to Etowah, Tenn. At Etowah there will be a meet with the General, Civil War engine. She will put on a show especially for the society members. Return will be over the Blue Ridge Division through the scenic Hiwassee River Gorge and over the Blue Ridge Mountains. Monday—bus trip to Stone Mountain Scenic Ry. Ex-Louisiana Eastern No. 1 will be exhibited, as well as a drama depicting pioneer railroading problems. Also on Monday, tour of Southeastern Transportation Museum at Lakewood Park, Atlanta. Package price of $22.50, exclusive of pre-Convention trip to Graham Co. RR, is offered. Write NRHS, P.O. Box 2209, Atlanta 1, Ga.

(Concluded on page 64)



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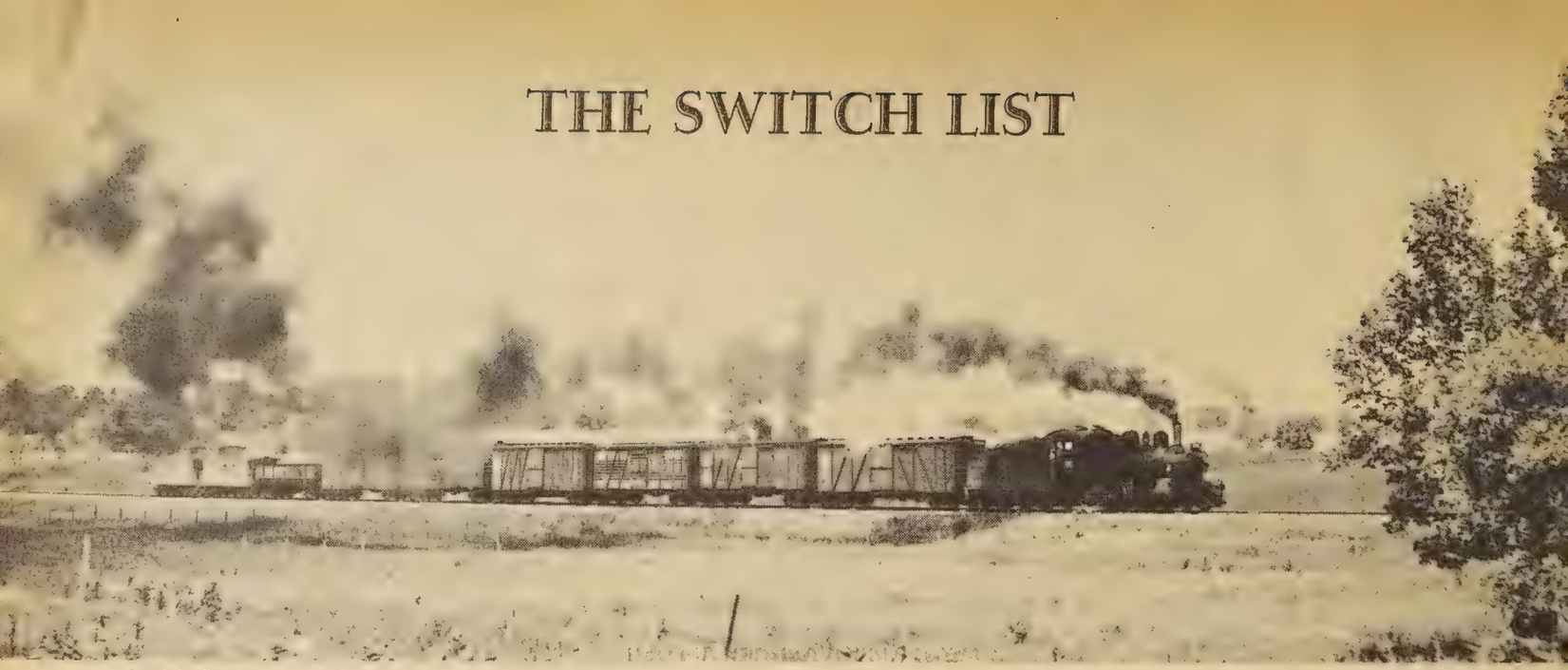

July 24, 1957: Canadian National way freight with 2-6-0 No. 86 chuffs through Dobbinton, Ontario, on way to Palmerston.
Don Wood, 29 Mt. Haven Drive, Livingston, N.J.

THE FOLLOWING items are published free and in good faith but without guarantee. Keep within 28 words, including name and address. Use abbreviations such as *tts.* (timetables), *emp. tts.* (employees timetables), *b&w* (black and white), and SAS (send 4¢ stamped envelope for list or details).

Every entry will appear in the next available issue; but we work far ahead, so don't be disappointed if yours is not printed at once. Be sure to mention:

(1) sizes of pix, (2) whether steam, diesel, or what, (3) whether or not a list is available, and (4) condition of books or magazines you offer.

If you want pen pals, state your special interests so that they will know what to write about.

Write each item plainly (or pen-print or typewrite it) on a postcard or separate sheet of paper—not buried in a letter dealing with other matters. We discard items hard to read. Address Sy Reich, *Railroad Magazine*, 205 East 42nd Street, New York 17, N.Y.

ELLIS ACKER, Jr., 615 40th St., Anniston, Ala., wants steam pen pals, esp. those interested in Ala. rrs.

LEN ADLER, 3705 Parkview Ave., Baltimore, Md., sells 35mm slides BTC, DCT. List 10¢; sample 30¢.

BERNARD ALBERT, 1276 Biltmore Dr. N.E., Atlanta, Ga., trades 35mm color slides transit equip., shortlines, industrial elecs., diesels, unusual equip.

W. W. ANDERSON, 6116 Glen Tower, Hollywood, Calif., sells 16mm rr. movies; list free.

BOB ASH, 1250 Balmoral, Westchester, Ill., wants 1930 issues of Railroad Magazine; 1880-1915 tts., esp. O., Colo., Ind., Ill., Mich.; 1900-'30 elec. tts. of O., Ind.

STAN BAKER, 2525 Pahl Ave. N.E., Minneapolis, Minn., seeks pix, negs., and 35mm color slides of steam in Mpls., St. Paul or vicinity. (What size pix?)

C. J. BARKMAN, Box 342, Kalkaska, Mich., will buy or trade for telegraph sounder. Has one that needs rewinding.

JOHN BARTH, Jr., 54 Poplar St., Closter, N.J., sells 5x7 pix diesel, elec., NYC, LIRR, E-L, etc.; list 5¢.

C. BEILSTEIN, 2901 Landover St., Alexandria, Va., will sell one copy of "Car and Loco Plans for Mdl. RRers" ('48, Santa Fe); make offer.

CHAS. BERT, 736 N. Overhill Ave., Park Ridge, Ill., will sell his size 616 steam neg. collection, NYC, WAB, CPR, CNR, GTW, etc., '35-'50. (SAS)

GARY BOUGHTON, 5914 Barton Ave., Los Angeles, Calif., trades PE tts., pix for MTA emp. tts., MCL size 127 pix.

HENRY BROAN, Jr., 65 Robinson Rd., Falmouth, Mass., wants pix NH 0500, Class 500 Alco rd. switchers. (What size pix?)

H. J. BURKHALTER, 28 Fleming St., Auburn, N.Y., will swap US commemarative stamps for rr. picture postcards.

RAY BYERS, 167 Feronia, Rutherford, N.J., buys and sells India ry. 8mm movies. (SAS)

CLARENCE CARLSON, 322 Madison Ave. S., Hopkin, Minn., will trade "Clear the Track" (engineer's biography) for some other rr. book.

DENNIS CARPENTER, 18 McDowell Pl., Newburgh, N.Y., wants 2x2 slides, any size pix or negs. Erie steam on Newburgh Br. of Newburgh shortcut, also U&D steam.

PAUL CHADOURNE, 901 14th Ave. S., Clinton, Iowa, wants data on B&NW 1 (2-6-2T), 10, later 100; B&S 4, later 44; D&RGW n.g. 240-243.

JEFF CLACK, Box 653, Wheatland, Wyo., buys, sells, trades steam pix, all sizes from 120 to 8x10, all rrs.; also steam and diesel negs.

HARRY CLARK, R.D. 2, Box 160A, Connellsville, Pa., will trade for any size pix of Indian Creek Valley Ry. locos, stations, sawmill.

WM. CLEARY, Jr., 90-31 Whitney Ave., Elmhurst, N.Y., sells pix LIRR diesel, MU, elec., PRR elec. Wants negs., pix LIRR steam. (What size pix?)

CHAS. CONNIFF, Box 4672, Mobile, Ala., sells sizes 616, p.c. pix steam, diesel, shortlines, logging, indus., Class 1 rrs. List, sample 25¢.

BOB COOKSON, Rte. 3, Newtown, Conn., sells back issues Railroad Magazine, Trains, Mdl. RRer, rr. steam records, rr. books. (SAS)

BILL CORBEN, 15307 White, Gradview, Missouri, sells 3½x5¾ or p.c. or 4x5 pix UP steam. No list. Buys, sells, trades UP negs., size 120 through 4x5.

ROGER COX, 28 Victoria Park Ave., Kirkstall, Leeds 5, Yorkshire, England, wants pen pals, U.S. or Canada, interested in steam, interurbans, n.g., or oldtimers. He belongs to Festiniog Ry. Soc. and Middleton Ry. Preservation Soc.

STAN CZAJKA, 600 Maddock St., Crum Lynne, Pa., sells orig. Baldwin 4x3¼ glass lantern slides, other railroadiana. (SAS)

ALEX. DARRAGH, 242 Greenleaf Ave., Wilmette, Ill., buys any size pix or negs., Beaver Valley Traction, Ohio Valley Scenic Rte., Harmony Rte.

OWEN DAVIES, 1214 N. LaSalle St., Chicago, Ill., buys, sells rr. books, mags., etc. Big list free.

DUANE DERRICOTT, 423 E. Centre St., Mahanoy City, Pa., sells stwitch keys, locks, rulebks., emp. tts.

FRANK DI FALCO, 31 Ringgold St., Haverhill, Mass., sells 5x7, 3x10 diesel pix New England rrs. Wants negs. B&M BL2's.

TERRY DURKIN, 1521 W. Camino Del, San Diego, Calif., sells PE sw. keys, locks; trades sw. keys.

C. FEATHER, 442 Salvini Dr., Pittsburgh, Pa., wants pic Pennsy T-1, NYC Niagara souvenirs; offers B&O Capitol Dome emblem, S-1 bldr. plate, T-3 No. plate, Vgn. elec. bldr. plate.

MALLORY FERRELL, 308 Rush Rd., Fayetteville, N.C., seeks pre-'15 shortline or n.g. annual passes; Va. n.g. pix, esp. Surry, Sussex & Southampton.

JACK FESCO, 4309 Edonhurst Ave., Los Angeles, Calif., wants sizes 116 or 120 SP negs. of 4400 Class with Mars headlight. Sells CP pix sizes 116, 120. (SAS)

CARLTON FITCHETT, 28 S. White St., Poughkeepsie, N.Y., will sell set of Railroad Magazine, Dec. '29-Dec. '61 complete, excellent cond.

BOB FREMMING, P.O. Box 147, Dallas, Wis., sells wide variety rr. postcards: Etchtone 24 for $1, photo-gloss 10 for $1; color (gloss) 5 for 25¢ plus 4¢ stamp or 20 for $1. (SAS)

MIKE GALPERN, 3152 Brighton 6 St., Brooklyn, N.Y., will sell Railroad Magazine '31-'50 or trade for 8x10 b&w steam pix.

JOE GARDNER, 931 N. Main, Wichita, Kan., will sell Railroad Magazine '34-'44, good cond.; '44-'54, excellent cond.

PEAER GARY, 680 12 St., Campbell, O., sells size 616 steam negs., NYC, B&O, PRR, UP. (SAS) Wants Erie, NYO&W, D&H, L&HR, W&LE, Y&S negs.

FRANKLIN GNAU, 1477 Ellicott Rd., Orchard Park, N.Y., wants tts. WNYP (now PRR), Buffalo Div., before 1900, or photo-copies of same.

PRENTICE GUDGEN, Jr., 417 W. Adams St., Pittsburg, Kans., buys rr. lanterns and globes, esp. old ones.

RON HAGFORS, RD 3, Elyria, O., desires pix Twin City trolleys and HO gage trolley pen pals.

GRAHAME HARDY, Box 622, Carson City, Neb., buys, sells much railroadiana. Big list free.

JOHN HAYDEN, 447 Darthmouth St., New Bedford, Mass., wants 5x7, 8x10 pix NE trolley rapid transit subway. (SAS)

MIKE HIGSON, 22 High St., Northwood, Middlesex, England, sells rr. books, pix, magazines, records, other railroadiana. Big list free.

JOHN HILTON, 10714 St. Paul St., Kensington, Md., will sell 5 bldrs. plates from DCT PCC's and bound vol. Ry. Age July-Dec. '20.

WM. HOFFMAN, Jr., 326 S. East Ave., Baltimore, Md., sells 5x7 pix CA&E.

DICK HOOVER, 1685 S. 14th St., Coshocton, O., wants any size pix, negs. p.c.'s of PRR, NKP, B&O, steam or diesel.

GEO. JANES, 2235 35th Ave., San Francisco, Calif., sells rr. postcards 12 for $1. (What kind, George?)

ARNOLD JOSEPH, 2512 Tratman Ave., New York, N.Y., sells back issues Railroad Magazine, Trains, Mdl. RRer, RMC, Mdl. Bldr., HO Monthly, others. (SAS)

SHELDEN KING, 308 W. Clinton St., Elmira, N.Y., sells copies of book "Elmira Trolleys," $1.25.

IRWIN KLORIG, 1010 N. La Vergne Ave., Chicago, Ill., sells tts., many rrs., 1913-'29.

JOE KRIVI, 2416 Illinois Ave., Granite City, Ill., collects rr. postcards, cuff links.

J. LAUGHLIN, 33R Winthrop, Rehoboth, Mass., will sell real 24" gage 0-4-4 coalburning Forney, new cond. Pix and details, $1.

BOB LE MASSENA, 1795 S. Sheridan Blvd., Denver, Colo., wants Karde's book "Ry. Loco. Maintainance," Sinclair's "Development of Loc. Engine."

JOHN LA RUE, Jr., Oakwood Dd., Medford, N.J., buys, sells, trades pix sizes 620-120, 616, 135, nonrevenue equip. of various rds. Detailed list, 16¢ stamps.

W. R. LINLEY, 30 Altair Ave., Ottawa, Ont., Canada, sells old issues Trains mag.; also 3x5 steam pix on approval. Trades 616, 35mm negs.

CARL LINVILLE, 3311 Cardiff Ave., Cincinnati, O., will sell old issues Railroad Magazine, 1914 to date, good cond. (SAS)

JEFF MARKER, 7331 Kildare, Lincolnwood, Ill., sells 8½x11 color plates Indiana elec. rrs. Sells emp. tts., pix size 4x4, 4x5, 5x7 of CA&E, CNS&M, CSS&SB. List, sample 15¢.

BARRY MAYER, 10228 Edgewood Ave., Silver Spring, Md., sells diesel pix (what size?) B&O, SP, SOU, C&O, etc. (SAS)

RON McCARTHY, 315 S. Florence, Springfield Missouri, trades Frisco emp. tts. for those of other rrs.

E. J. McGRATH, Box 376, Mahanoy City, Pa., will sell set of 300 emp. tts.; no list.

ROY McLAIN, 1501 Laurel Ave., Knoxville, Tenn., sells size 616 steam pix southern coal and lmbr. shortlines.

MAX MILLER, Box 175, College Corner, O., sells 50 size 116 steam pix. Buys GR&I pix, negs.

L. D. MOORE, JR., 2102 Parker Ave., Portsmouth, Va., sells much railroadiana incl. negs., magazines, bks., tts., postcards. List 10¢.

A/IC CARL MUNCK, Bldg. 143, Apt. 1, Camp Kilmer, N.J., sells D&H pix. (SAS) Wants D&H negs., esp. 0-6-0, 0-6-6-0, 2-6-0. (What size pix and negs., Carl?)

BILL MYERS, 50-31 Newtown Rd., Woodside, N.Y., wants pen pals interested in trolleys.

DAVE NESTLE, 81 Hill St., Greenwich, N.Y., sells much railroadiana, incl. back issues of Railroad Magazine.

JOHN NOWAKOWSKI, 2123 N. Lorel Ave., Chicago, Ill., will buy bldrs. plates or trade HO equip. for them.

JIM O'DONNELL, 121 Arthur St., Truro, N.S., Canada, wants pix (what size?) DAR, CPR cabooses, combines, coaches, DAR locos.

MERLIN OLIVE, 1016 3 St. W., Willmar, Minn., buys any size steam negs., all rrs.

DICK PALMER, 1716 Valley Dr., Syracuse, N.Y., will sell or trade 1856 RR. Guide. (What condition?)

BILL PENNINGTON, Box 478, Portola, Calif., sells 620 and larger steam, elec., diesel negs. of logging, n.g., and shortline rrs.

ART PETERSON, Institute of Microbiology, Rutgers, New Brunswick, N.J., will sell books "The Steam Locomotive" and "Hear the Train Blow," exc. cond.

DON PEVSNER, 300 West End Ave., New York, N.Y., sells 8x10 pix NYC Niagaras and Hudsons.

HAROLD PHILLIP, SR., 13509 Blenheim Rd., Cleveland, O., will sell or swap 35mm and 8mm color movies Cleve. or SHRT cars. (SAS).

MRS. MARY PICKARD, 1824 Southeastern Ave., Indianapolis, Ind., trades non-rr. postcards for rr. postcards, playing cards.

LOUIS POLINIAK, 1017 N. Washington St., Shamokin, Pa., wants telegram of Overland Pacific and Amer. Telegraph companies.

DAVE POND, 85 California Dr., Rochester, N.Y., no longer issues monthly bulletin.

HERNDON PRICE, 204 Chambers Ave., Georgetown, Ky., wants small steam and diesel pix.

VERNA PRILLER, 2401 W. Forrest Hill, Peoria, Ill., will buy C&A color and b&w steam slides.

J. R. QUINN, Box 1044, Tillson, N.Y., sells size 116 or p.c. orig. steam negs., 50 rrs.

W. W. RAFIELD, Box 1, Winnfield, La., will sell ICC reports 1887-'20.

WALT REDMAN, 8906 Piedmont, Detroit, Mich., trades travel p.c.'s for used depot cards. Sells back issues Railroad Magazine, Trains, Off. Guides, tr. orders, tts.

JEFF ROBBINS, 1251 S. Point View St., Los Angeles, Calif., sells pix, slides steam, diesel, elec., gas of trunk, shortline, indus., logging rrs., trolleys, interurbans. (SAS)

G. RUCH, 3834 W. 105 St., Chicago, Ill., buys, trades steam, interurban loco whistles, bells.

H. N. SAWYER, 610 Empire Blvd., Rochester, N.Y., sells brass safety lamps, tts., emp. tts., rr. watches, mags., 8x10 steam pix, other railroadiana. (SAS)

BRUCE SCOTT, 178 James St., New Glasgow, N.S., Canada, will trade steam pix for size 116 Heisler or Shay pix. (SAS)

WM. SEIGFORD, 606 4 St., New Cumberland, Pa., will buy '27, '29, '33 PRR wall calendar pix, Trains Photo Album No. 18.

GEO. SEMENCHUK, Somerset, Man., Canada, buys regulation pocket rr. watches, good cond.

T. SHOFER, 4359 Lafayette, Evansdale, Iowa, wants rr. pix and rr. postcards.

JIM STAGGS, Rte. 7, Box 94, Tucson, Ariz., will sell 1½" scale, 7½" gage 4-4-0 live steamer for $200. She needs some steam fittings and water tender, otherwise is complete.

MAJ. DON STEGMANN, Quarters 8652, Ft. Lewis, Wash., wants pix and negs. trolleys of Aurora, S. Bend, Gary, Nthn. Ill.

MIKE STERNFELD, 2611 York St., Fair Lawn, N.J., sells rr., trolley pix, railroadiana. Will buy or trade for Lucas' "History of NYS&W," also "Men of the Erie." (SAS)

FRED STOEST, 1601 Harper St., Santa Cruz, Calif., sells action pix SP, WP, YV, ATSF, D&RGW; list 10¢.

AL STOKES, 3958 S. Hill St., Los Angeles, Calif., sells, trades diesel, steam loco bldrs. pix. (SAS)

PETE SWANSON, Jr., Warwick, kFD 4, Spartanburg, S.C., wants plans of P&N 5100, 5500, 5600 Class locos.

STEVEN TARAJACK, 52 Tremble Ave., Campbell, O., wants used postage stamps of any country with rr. pix on them.

PAUL THOMPSON, Box 1804, Prescott, Ariz., sends ATSF tr. orders free for SAS as long as supply lasts.

BILL TOTH, 312 Grandview Ave., Fords, N.J., will sell orig. editions of "High Iron" and "Highball."

R. R. TRIBLE, 1130 Main, Dubuque, Iowa, sells UP, IC, M&SL 616 steam negs. (SAS)

JOEL VAN WAMBEKE, 382 Hendee St., Elgin, Ill., sells 3x10 pix diesel, steam of C&NW, MILW, others. List free.

FRANK VOLLHARDT, Jr., 2435 Mahoning Ave., N.W., Warren, O., buys steam pix, Canadian short and indus. lines, any size.

D. VOYTANIC, 3419 W. 65th Pl., Chicago, Ill., sells condr. punches, tkt. validaters, steam hardware.

HOE WELESKI, Herschel, Sask., Canada, wants used, stamped, rr.-picture postcards.

A. D. WELLBORN, Box 2487, Ft. Worth, Texas, wants pix Katy diesels with new color and lettering.

HENRY WILKENS, 69 Whitney Ridge, Hamden, Conn., trades railroad matchbooks. (SAS)

BRUCE YOUNG, 2018 Broadway, Springfield, O., wants pix (what size?) MC, Battle Creek Div.; NYC, Goshen and Mich. Br., present-day between Goshen and Shipshewana, sou. Mich. trolleys.

Model Trading Post

BOB ASH, 1250 Balmoral, Westchester, Ill., wants AF O gage 3015, Ives 3253 (green), O gage reefer that went with 3000 series AF '27 pass. cars.

HARRY BENNETT, Jr., 1804 N. Mount St., Baltimore, Md., wants GMC handcar, Ralstoy frt. trls, Ting REX truck kit, Pacific Mdl., Eng. city bus kit.

MEL BRINDLE, 816 Hix Rd., Wayne, Mich., will trade itinerary of KCM&O special tr. for 700 series frt cars.

D. M. CHRISTISEN, Box 122, Columbia, Missouri, issues monthly trade paper for mdl. railroaders; sample copy free.

LOUIS COTNOIR, 66 Capitol St., New Bedford, Mass., trades, sells new O, HO gage scale Japanese models. Wants O gage scale diesels. (SAS)

GEO. FISHER, 711 N. 32nd Ct., Hollywood, Fla., will buy toy trs., streetcars, clockwork or elec., AF 1927 president spl.

E. LARSON, 6615 S. Bell Ave., Chicago, Ill., sells 2-rail O gage scale frt. cars. (SAS)

WARREN LEWIS, Box 156, Hopatcong, N.J., will sell Lionel std.-gage 392E, 424, 425, 426, 511, 512, 514R; Ives 1773, 1776, all orig. cond.

L. D. MOORE, Jr., 2102 Parker Ave., Portsmouth, Va., sells HO, O gage items. Buys std. and wide-gage trs., cars. (SAS)

PAT MURPHY, 1726 N. 3, Philadelphia, Pa., will sell 7¼" gage steam 4-6-4 and 0-4-0 coalburners, also 12" gage steamer. Pix, list $1.

T. J. PELLETIER, Church St., and B64, Palouse, Wash., wants Marx pass. cars, Lionel tank car, AF tank car, all with hand couplers.

BOB SCHMIDT, 1949 Lehigh St., Easton, Pa., trades O scale equip. Seeks Kusan-Auburn pass. cars, super O track parts.

JIM TANDY, box 35, Carrollton, Ky., will buy Lionel 128 station, 840 power sta., 43 motorboat, 38 pumping water tower, 313 bascule bridge.

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Dramatic 13-day trip of Lincoln's funeral train with *two* corpses on board. Did you know that ghouls tried to steal Lincoln's body? Also: burial trains of Jefferson Davis, Grant, Garfield, McKinley, Harding, and F. D. Roosevelt. Feature article by Freeman Hubbard in December issue of

Railroad Magazine

Out Oct. 2, 50¢ on newsstands or write to *Railroad Magazine*, 205 E. 42nd St., New York City.

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Railroad Hobby Club

(Continued from page 59)

Sept. 8 and 9: Four 28-mile steam excursions, Middletown to Unionville and back, two apiece Sat. and Sun., sponsored by Empire State Ry. Museum, Inc. Two photo stops on each run over old Middletown & New Jersey Ry., leaving from M&NJ station, Middletown, N.Y., 11 a.m. and 3 p.m. both days, DST. Train pulled by ex-Sumter & Choctaw No. 13, now owned by Museum. Fare $3 (kids $1.50). Tickets bought on day of trip cost $1 extra. All 4 trips timed to connect with Erie-Lackawanna trains from New York. Limited number of tickets available. Write promptly to Jack May, 5601 Riverdale Ave., New York 71, N.Y., specifying exactly what tickets you want and for which trip. Enclose stamped addressed envelope with each order. Make checks payable to Empire State Railway Museum, Inc.

Oct. 7: Steam to Oz—excursion over Kentucky & Tennessee Ry. of the Stearns Coal & Lumber Co. Rugged mountain country seldom visited by outside world since K&T has no passenger service and there are few highways in area. Fare to Oz, Ky., from Chattanuooga $9.50, kids $4.75. All profit goes to the Museum. Full details from P. H. Merriam, Tennessee Valley Railroad Museum, P.O. Box 44, Chattanooga 1, Tenn.

Oct. 14: NYC freight-only West Shore branch will be covered from Albany Union Station, (9 A.M. EDT) by Capital District Railroad Club. Lv. Albany Union Station 9 A.M. EDT over main line west to Schenectady, then via Carman cutoff and freight line to Selkirk yards, then down West Shore to Newburgh, N.Y. where time will allow for lunch and ferry trip to Beacon for ride on the incline railway. Tickets $7 (kids, $3.50), from J. T. Dempster, 27 Cherry Lane, Scotia 2, N.Y. Extra charge if bought on day of trip.

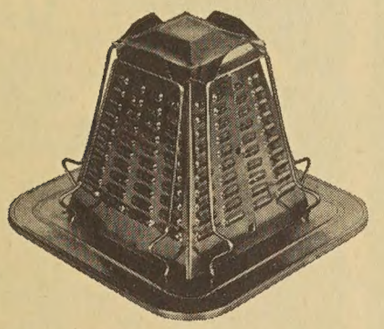
Oct. 14: West Shore and Catskill Mountain branches of NYC. Fall foliage tour will begin in Newburgh, N.Y. (one-hour connecting bus from New York City), and will run to Kingston, N.Y., thence to Oneonta, over ex-Ulster & and Delaware and return. Info from Donald L. Pevsner, 300 West End Avenue, New York 23, N.Y.

Five years ago this Nickel Plate through freight, St. Louis to Buffalo, crossed ravine just east of Painesville, Ohio.

Don Wood, 29 Mt. Haven Drive, Livinston, New Jersey

Men's Mart

All products shown here may be obtained directly from indicated sources. Send check or money order with your order. Manufacturer will refund full purchase price on prompt return of unused, non-personalized items. This department is not composed of paid advertising.



BURNING QUESTION: Tired of burnt toast? You can toast 4 slices at a time; watch it as it turns golden brown before your sleepy-though-they-may-be eyes. Get exact shade you like. Uses **no electricity.** Use over gas stove burner or fire place. Seekers of the unusual will warm up to this nifty gift. $1.98 ppd. Best Values, Dept. 68, 430 Market St., Newark, N.J.

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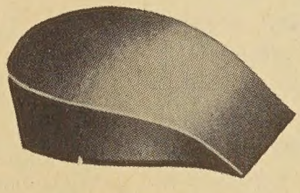

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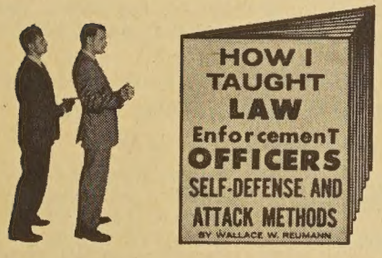

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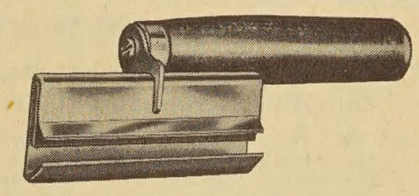

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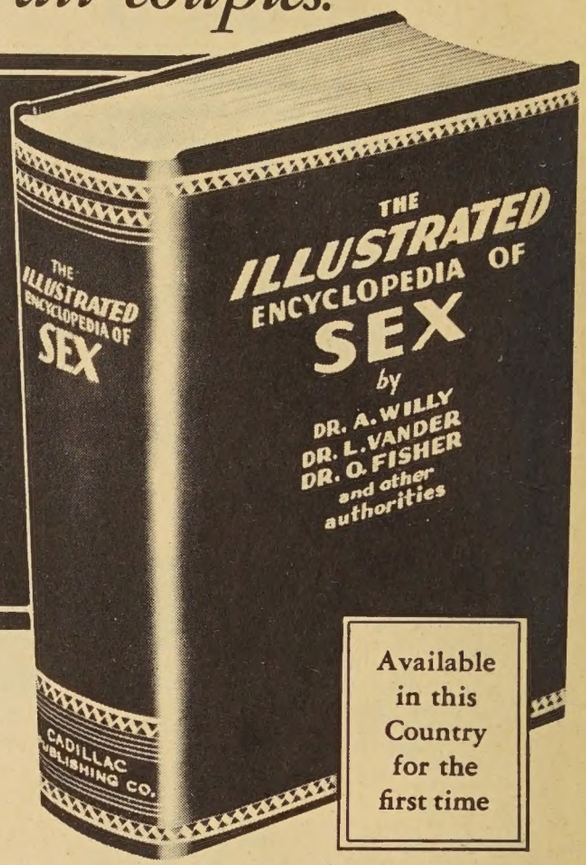

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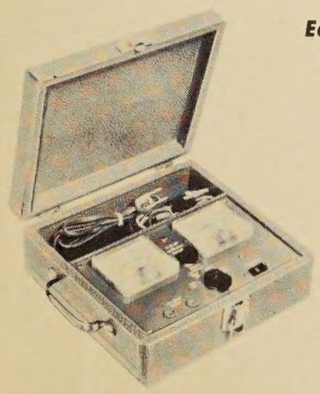

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NRI Graduate CHESTER M. SIEMS, 2326 Corbin St., Melvindale, Mich. tells that he saved big money just keeping his own major electric appliances in repair. Says he would recommend the course to anyone.

CARL BOEHMKE, 636 Grove N.E., Albuquerque, N. Mex., lost his job through pneumonia. His NRI diploma got him a job with an Appliance Service Center where he's doing the kind of work he enjoys, and the climate is much better for his health.

FRANK S. NETTNAY, 827 N. 7th St., Vincennes, Ind. gets all the spare-time appliance repair work he can handle from hardware store where he has a regular job.

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* *Letters on file*

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